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PERSPECTIVES
PERSPECTIVES
PERSPECTIVES



ON
MEDICAID AND MEDICARE
MANAGEMENT

The Health Care Financing Administration

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THE HEALTH CARE FINANCING ADMINISTRATION is the agency of the U.S. Department of Health, Education, and Welfare that administers Medicare, Medicaid and other programs related to financing timely and appropriate delivery of health care services. The mission of this agency is to promote the timely, cost effective delivery of appropriate quality health care services to Agency beneficiaries; to make beneficiaries aware of the services for which they are eligible; to make those services accessible; and to ensure that Agency policies and actions promote efficiency and quality within the total health care delivery system.

THE MEDICAID/MEDICARE MANAGEMENT INSTITUTE (M/MMI), within the Health Care Financing Administration, Bureau of Program Operations, works with Federal, State, and contractor staff toward improved management of the Medicaid and Medicare programs.

The M/MMI promotes program management improvements through problem analysis and technical assistance for corrective action, and fosters exchange of ideas and techniques through conferences, workshops, training and publications.

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1980: Feb.

PERSPECTIVES ON MEDICAID AND MEDICARE MANAGEMENT

**FEBRUARY, 1980
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
HEALTH CARE FINANCING ADMINISTRATION
(HCFA) 79-20021**

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INTRODUCTION

The HCFA reorganization created an expanded role for the old Institute for Medicaid Management, now the "Medicaid/Medicare Management Institute" (M/MMI). The Institute continues to provide a forum for exchange of ideas and expertise among States, through conferences and publications, and to maintain a clearinghouse of Medicaid management publications through the Improvements Promotion Division (IPD). IPD staff also conduct Medicaid and Medicare program training for HCFA employees, and coordinate HCFA's interface with the Medicare intermediary and carrier advisory groups.

Perspectives is also sent to Medicare contractors: As our publication's title reflects, we include articles on Medicare operations. We believe that their contributions will enhance the benefits of our publication; since a broader range of ideas and experiences will be shared across HCFA's two major programs, Medicare and Medicaid.

This publication serves as a vehicle for disseminating various State solutions to problems, innovative ideas and articles of general and special interest to State Medicaid managers and staff. We welcome articles on any subject related to either program. We are particularly interested in receiving articles from State agency representatives and Medicare contractors. Responses to previously published material are also welcome.

We see this publication as a joint effort. If it is to be successful, we must have contributions from the States and Medicare contractors as well as their views on how well we are meeting their needs.

Please forward all communications, contributions, requests for information, and materials to:

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TEXAS RECIPIENT HEALTH CARE EDUCATION PROGRAM

by EDNA FAYE CAMPBELL, R.N.

The Program

The Texas Recipient Health Care Education Program (RHCEP) is an innovative pilot project, implemented in March 1976 in five counties representing the metropolitan areas of San Antonio, Dallas, Houston, Corpus Christi, and Fort Worth. The purpose was to correct recipient misutilization of medical services and to assist the recipient's entry into the main stream of medical care.

The program was established on the theory that health care educational counseling would reduce over-utilization patterns of some Medicaid recipients who were identified as high utilizers of nonessential medical services, and thereby reduce the cost of health care services to the State. To assure quality health care in the process, the staff uses educational counseling to meet the needs of the individual rather than presenting a uniform program.

The primary objectives of the education program are to educate the selected recipients who are high utilizers of medical services to use their benefits wisely; to provide only those essential services that are of high quality, appropriate to the recipient's needs, timely, delivered at the appropriate place, and provided at a reasonable cost; and to enhance the utilization review of the providers of medical services.

One reservation about any patient health care education program is the possibility that counselors will discuss problems that are the responsibility of the physician. This has not happened with RHCEP.

Physicians have responded favorably to the health education program. Recipients become more interested in their own health care, ask more intelligent questions, and follow the doctor's directions with more accuracy. Instead of visiting the doctor's office either with every minor illness or injury or only when desperately ill, their visits are more appropriate.

Health care education counseling has saved the Texas Medicaid program an estimated \$8,326,921 from its start in March 1976 thru August 1979, and at the same time enhanced the quality of medical care. Saving is based on the assumption that, without coun-

seling on the appropriate use of medical services and Medicaid benefits, those recipients enrolled for counseling would have continued to utilize medical benefits at a high rate. For the same period, the Education Program cost \$1,042,631. The estimated benefits cost ratio is approximately eight dollars saved for each dollar spent. In addition, counseling improves the quality of life of the recipient/family. Intangibles such as preventive medicine, participation in job training, and family planning result in additional savings which cannot be measured.

Background

The Texas State Department of Human Resources (DHR) is the Medicaid single State agency which is responsible for the administration and purchase of comprehensive health care for approximately 625,000 categorically eligible recipients in the Medicaid program.

In Texas, public policy exerts a strong and dominating influence on legislative and other governmental activities relating to outlays of funds. In recent years, the public has become increasingly concerned over the rising costs of Medicaid appropriations. The agency administering such a statutory program has a fundamental responsibility of accountability to the public and must control the cost of necessary medical care without sacrificing the amount, duration, or scope of such care.

In accordance with public policy and being aware of misutilization of medical services, DHR is constantly reviewing ways to meet demands from the public and the legislative bodies to reduce costs without sacrificing the quality or quantity of care provided to recipients.

In 1975, the Department's Medical Administration began to look at various efforts in other States regarding cost reduction programs for medical services, but found no program that would function in a manner suitable to meet the goals and objectives of the State. With approval by the Board of Human Resources, (formerly the Board of Public Welfare) and on the

recommendation of the Title XIX Medical Care Advisory Committee, DHR decided to increase activity to educate recipients who were recognized as high utilizers—particularly those who use nonessential medical services—and also to increase utilization review of providers of services. This decision resulted in plans for organizing field and State office staffs to implement the Recipient Health Care Education Program.

The RHCEP field staff was organized to function under the direction of the field based Medical Assistance Unit (MAU) physician director. The already existing MAUs were responsible for providing consultation to contracted long term care facilities, assuring quality patient care, and performing level of care determinations for vendor payment purposes. Health education staff included a registered nurse supervisor, a public welfare social worker, a community service aide, and a clerk typist. Only the registered nurse or social worker provided recipient counseling. Within the State office, medical executive and other professional staff provided administrative support and technical guidance to the field staff.

Before implementation of the program, the State office researched, collected, assembled, and analyzed a sampling of information concerning recipient use of medical services. The data revealed over-utilization patterns in the areas of (1) number of doctor office visits; (2) number of outpatient hospital visits; (3) length and frequency of hospitalizations; (4) use of multiple physicians; and (5) usage of an excess of a total dollar volume for services provided during the time period examined. The data revealed that over-utilization of nonessential medical services was the primary problem and, consequently, appropriate screening parameters (Table 1) were developed to identify over-utilizers.

With the development of additional statistical data, other influencing factors became more evident, giving further support to the need for the educational program. For example, a statistical sample revealed that of 456,986 individuals who had received medical benefits, approximately 2% of the recipients used 12% of the funds. In dollar figures, the average was \$4,699 per recipient. The dollar figure for the other 98% was an average of approximately \$355 per recipient. Statistical data also showed that the recipients in question lived within the five metropolitan areas (San Antonio, Dallas, Houston, Corpus Christi, and Fort Worth) and that recipients of Aid to Families with Dependent Children seemed to be the primary over-utilizers of medical services.

TABLE 1: Current Computer Screening Parameters

These screens currently employed to isolate potential high utilizers of Medicaid services are run against a 12-month history file of medical services.

Only AFDC (Aid to Families with Dependent Children) recipients who reside in Bexar, Dallas, Harris, Nueces, and Tarrant counties are screened. Nursing home/institutional recipients are excluded.

Average recipient with greater than \$1,000 Medicaid charges, excluding surgery and in-patient hospital charges.

In-patient Hospital Stays – 3 or more

Office Visits – 25 or more

Out-patient Hospital Visits – 25 or more

Out-patient Hospital/Office Visits – 25 or more

Different Physician Visited – 6 or more

As a result of the extensive research and analysis, DHR received approval to notify all Medicaid recipients and providers of services of the intent to increase surveillance of the program. It is important to note that recipient and provider cases are handled separately. Recipient cases are handled by DHR, and since the Recipient Health Care Education Program was never intended to handle provider misutilization cases, these are referred to the appropriate organization.

Prior to implementation of the program on March 1, 1976, Medical Programs staff developed a packet that provided information for the field based education staff. They conducted an initial workshop in which they discussed in detail the procedures for administering the program and provided guidelines delineating roles and responsibilities.

Effective October 1, 1977, the regionally based Medical Assistance Units and their nursing home consultation and level of care determination functions were transferred to the State Department of Health. In conjunction with this transfer, the Recipient Health Care Education Program (RHCEP) field staff and functions remained in DHR and were placed under the administrative management of the DHR regional offices.

The RHCEP project director and staff are responsible for the program on the State level. The project director's principal function is to perform technical/medical supervision, professional consultation, and general administrative duties, including day-to-day monitoring of the RHCEP. The Systems Develop-

ment Bureau, Surveillance Utilization Control Division, and Purchased Health Service Division provide program support, as needed.

Present Operation

The RHCEP is in operation in the five designated project areas. During the period from March 1, 1976, through August 31, 1979, some 6,409 AFDC recipients were selected for participation in the program. During fiscal year 1980, 496 recipient cases have been selected for participation; enrollment as of November 1, 1979, is 1,287 (Table 2). Approximately 150-200 new enrollees are added each month.

TABLE 2: Recipient Health Care Education Program Statistics

<i>Fiscal Year 1976 (Program Implemented 3/1/76)</i>	
Recipients Enrolled in Program	1240
Recipients Removed from Program	481
Recipients Remaining in Program as of August 31, 1976	<u>759</u>
Total Recipients Participating in Program for Fiscal Year 1976	1240
<i>Fiscal Year 1977</i>	
Recipients Enrolled in Program	1556
Recipients Removed from Program	1540
Recipients Remaining in Program as of August 31, 1977	<u>775</u>
Total Recipients Participating in Program for Fiscal Year 1977	2315
<i>Fiscal Year 1978</i>	
Recipients Enrolled in Program	1473
Recipients Removed from Program	1340
Recipients Remaining in Program as of August 31, 1978	<u>908</u>
Total Recipients Participating in Program for Fiscal Year 1978	2248
<i>Fiscal Year 1979</i>	
Recipients Enrolled in Program	2140
Recipients Removed from Program	1935
Recipients Remaining in Program as of August 31, 1979	<u>1113</u>
Total Recipients Participating in Program for Fiscal Year 1979	3048
<i>Fiscal Year 1980 to date (November 1, 1979)</i>	
Recipients Enrolled in Program	496
Recipients Removed from Program	352
Recipients Enrolled as of November 1, 1979	1287

The RHCEP staff consists of 13 registered nurses, 1 social worker counselor, 5 community service

aides, and 8 full time and 1 part time clerk typists. State office staff includes three RN's and two clerical staff.

Using computerized screening parameters, State office staff select recipient cases that indicate over-utilization patterns. Professional medical personnel review the Medical Recipient Profile (Table 3) for evidence of medical necessity. Cases that reflect over-utilization patterns receive further analysis to determine the extent of over-utilization and the need for enrollment. The recipient profiles are sent to the education field staff for use in person-to-person counseling and evaluation performed by the nurse or social worker counselor.

Usually the Medicaid recipients receive their Medical Care (Medicaid) Identification Card and Explanation of Benefits Form (Figure 1) in the mail. This card verifies their eligibility to receive services and explains recent services that have been paid on their behalf. For recipients enrolled in the education program, this form is sent, along with the Medical Recipient Profile, to the field office. Recipients then obtain their cards at the counseling sessions.

The recipient's first contact with the health education project is a notification letter (Figure 2) explaining that they have been selected to participate in the program and that a RHCEP representative will tell them how to get their Medical Care Identification Card. This letter assures the recipient that he/she is still eligible for participation in the Medicaid program. The recipient receives an appointment letter (Figure 3) informing them of the date, time, and place of their appointment. The appointment letter can be used in lieu of the Medical Care Identification Card until the date of the appointment. If a recipient needs the card before their scheduled appointment, they can come to the RHCEP office and pick it up or they can ask to have it delivered if they are unable to pick it up. The recipient is asked, however, to keep the scheduled appointment.

Community service aides telephone or, if necessary, visit recipients who do not keep appointments in order to establish rapport and to tell them about the program. We want the recipients to want to come and keep their counseling appointments.

On the initial visit, the counselor explains the nature of the program, assuring the recipient that the Medicaid program is not taking any necessary services away from them, but wants to help recipients learn to utilize their medical benefits wisely and thereby help to reduce costs. The counselor reviews, with the recipient, the Medical Profile and the current

TEXAS STATE DEPARTMENT OF PUBLIC WELFARE
POTENTIAL REHECD EMPLOYEES FOR MONTH OF APR, 1970

CAT CASE NO	NAME	SEX	RACE	GRP	CITY	TYPE	CLIENT	BIRTH- DATE	AGE	CERT DATE	SERV LUC.	NAME OF PROVIDER	PROVIDER	DESCRIPTION OF SERVICE	OFFICE VISIT	DATE PAID	AMOUNT PAID	ICN NUMBER/ VENOR NO.	
2-000000-01	JACKS, FREDIA	2	1	0	000	01	A	01 01 51	26										
DATE OF DESCRIPTION OF SERVICE	DIAGNOSIS/DESCRIPTION OF PRESCRIPTION																		
02 04 78	5295 - VAGINAL BLEEDING													1 9002 OFFICE VISIT	0	030378	\$ 22.00	078037243	
02 04 78	8000 COMPLETE COUNT ROUTINE													5 7628 LAB & X-RAY	0	030378	\$ 5.00	078037243	
01 06 78	IBERET FOLIC-500 FILTAB 60													208722 030 0Y-SUP030		011778	\$ 7.07	12C34000	
01 06 78	TYLENOL W/COO #3 TAB 500													208723 015 0Y-SUP003		011778	\$ 3.98	12C34000	
01 06 78	KEFLEX PULV 250MG 100													007131 020 0Y-SUP005		030178	\$ 8.51	46C267000	
01 02 78	6314 - ABNORMAL PREGNANCY WITHOUT SE													2 4820 SURGERY		021178	\$ 246.00	078030166	
12 19 77	6314 - ABNORMAL PREGNANCY WITHOUT SE													0 0004 NOT FOUND		031178	\$ 27.50	078055309	
12 14 77	VALIUM TABS 5MG 500													794747 020 0Y-SUP015		020178	\$ 2.79	460269771	
12 04 77	6500 - DELIVERY WITHOUT COMPLICATION													4 7586 ECHOGRAPHY FE		021078	\$ 18.00	078025306	
12 04 77	PELVICPALMETRY													3 6303 LAB & X-RAY		022478	\$ 14.09	078009238	
11 26 77	VALIUM TABS 5MG 500													207449 015 0Y-SUP004		121377	\$ 3.90	12C34000	
10 12 77	4650 - ACUTE UPPER RESPIRATORY INFECT													1 9000 OFFICE VISIT		111177	\$ 10.00	077294171	
10 12 77	4650 - ACUTE UPPER RESPIRATORY INFECT													1 1603 PENICILLIN 80		111177	\$ 3.00	077294171	
10 12 77	LAROTID CAPS 250MG 100													853067 015 0Y-SUP004		120177	\$ 6.39	460262081	
10 12 77	NALOXON TAB 100													853069 020 0Y-SUP006		120177	\$ 4.09	460262081	
10 12 77	PHENERGAN EXPT													853068 004 0Y-SUP004		120177	\$ 2.58	460262081	
08 20 77	7880 - OTHER GENERAL SYMPTOMS, ELECTR													0 0004 NOT FOUND		101477	\$ 10.00	077276301	
08 20 77	7880 - OTHER GENERAL SYMPTOMS, ELECTR													1 1805 VISTARIL, 25M		101477	\$ 3.00	077276301	
07 05 77	7910 - HEADACHE													1 9002 OFFICE VISIT		014977	\$ 14.26	077185208	
07 05 77	-ESTRIOL, PREGNANCY, URINE													5 7315 LAB & X-RAY		071877	\$ 5.00	077189208	
07 05 77	ROUTINE CHEMICAL AND MICROSCOPIC													5 7934 LAB & X-RAY		071877	\$ 3.80	077189208	
07 05 77	ROUTINE ANALYSIS HANGING DROP FOR SPERM													5 7982 LAB & X-RAY		071877	\$ 2.00	077189208	
07 05 77	DARVOXET-N-100 TABS 500													035676 030 0Y-SUP006		071977	\$ 5.37	140137000	
07 05 77	SULTRIN VAG CREAM W/APPL													035675 001 0Y-SUP010		071977	\$ 6.99	140137000	
06 28 77	9564 - DESCRIPTION NOT IN ICDA FILE													1 9000 OFFICE VISIT		071877	\$ 9.00	077182184	
06 26 77	7969 - UNKNOWN/UNSPECIFIED CAUSE OF M													5 7813 CULTURE SCREE		072977	\$ 9.00	077199309	
06 26 77	7512 - HIRSCHSPRUNG'S DISEASE													1 9159 OUTPAT. CARE		081577	\$ 22.50	077182201	
06 26 77	5640 - CONSTIPATION													1 9155 OUTPAT. CARE		081977	\$ 9.30	077202196	
06 25 77	3840 - OTHER INFLANTRY DISEASES OF E													1 9095 HOME VISIT		071877	\$ 13.30	077182184	
06 25 77	3840 - OTHER INFLANTRY DISEASES OF E													1 1806 OFFICE VISIT		071877	\$ 3.09	077182184	
06 20 77	7910 - HEADACHE													035403 020 0Y-SUP005		071177	\$ 9.00	077181460	
06 19 77	7910 - HEADACHE													0 0005 NOT FOUND		070577	\$ 5.44	140137075	
06 19 77	7910 - HEADACHE													0 0004 NOT FOUND		071177	\$.75	077178309	
06 03 77	7179 - MUSCULAR RHEUMATISM FIBROSITIS													1 9000 OFFICE VISIT		071177	\$ 10.00	077160180	
06 03 77	7179 - MUSCULAR RHEUMATISM FIBROSITIS													5 7961 LAB & X-RAY		072577	\$ 10.00	077160180	
06 03 77	ROUTINE CHEMICAL AND MICROSCOPIC													5 7934 LAB & X-RAY		072577	\$ 3.50	077160180	
06 03 77	7179 - MUSCULAR RHEUMATISM FIBROSITIS													1 1308 HYDROCHORTISON		072577	\$ 9.30	077160180	
05 10 77	3001 - HYSTERICAL NEUROISIS													1 9000 OFFICE VISIT		060677	\$ 9.00	077143184	
05 10 77	3001 - HYSTERICAL NEUROISIS													1 1805 VISTARIL, 25M		060677	\$ 2.90	077143184	
05 05 77	7939 - OBSERVATION W/O NEED OF MEDICA													4 7301 BOTH HIPS AND OH		052777	\$ 40.00	077136209	
04 29 77	7837 - PAIN IN CHEST													1 9004 OFFICE VISIT		061377	\$ 6.70	077129208	
04 19 77	ELAVIL TAB 100MG													034203 015 0Y-SUP015		051077	\$ 7.50	140137075	
04 19 77	7837 - PAIN IN CHEST													1 9004 OFFICE VISIT		061377	\$ 6.70	077129208	
2-517959	TOTAL																\$ 2,059.51		

SCREEN BUSTER TOTALS 2-0000000-01 JACKS, FREDIA

OUTPATIENT VISITS 5 OFFICE VISITS 12 TOTAL VISITS 17
NUMBER DIFF OUCTORS 6 NDR HOSPITALS TOTAL AMOUNT \$ 852.83

CASE TOTAL \$ 2,059.51

INFORMATION HAS BEEN DE-IDENTIFIED

TABLE 3: Medical Recipient Profile

MEDICAL EFFECTIVE DATE	RECIPIENT NO.	ELIGIBLE RECIPIENT'S NAME	By	DOB DATE	GLASSES	HEARING AID	DENTURES	FAMILY PLANNING	MEDICAL	DENTAL	DOCTOR'S VISITS
11-09-70	F 2000-002-01	CAROL JONES	1	07-44							1
11-09-70	F 2000-002-02	JANE JONES	2	06-63							3
11-09-70	M 2000-002-03	FRED JONES	3	11-64							4
11-09-70	M 2000-002-04	CHARLES JONES	1	01-66							5
11-09-70	M 2000-002-05	HENRY JONES	2	09-67							5
11-09-70	M 2000-002-06	SAH JONES	1	07-69							5
11-13-73	M 2000-002-07	ROBERT JONES	1	11-73							5

NEEDS INCLUDED IN YOUR CHECK REMAIN THE SAME
 INSTRUCTIONS ON BACK
 INSTRUCCIONES EN EL REVERSE
 CAROL JONES
 1000 AVENUE A
 MY TOWN, TX 78000
 02
 002000002
 01
 FOR D P W USE ONLY

1 YEAR HERE KEEP THIS CARD
 1 YEAR HERE KEEP THIS CARD
 EN LAS CLINICAS DE PLANEAR FAMILIA PUEDE CONSEGUIR GRATIS
 EXAMENES MEDICOS, ANALISIS DE LABORATORIO Y CONSEJOS SOBRE
 TODOS LOS METODOS CONTRACEPTIVOS INCLUYENDO LA ESTERILIZACION.
 HABLE A UNA CLINICA O CON UN TRABAJADOR DE SERVICIOS SOCIALES
 DEL DEPARTAMENTO DE RECURSOS HUMANOS DE TEJAS.

EXPLANATION OF BENEFITS (THIS IS NOT A BILL)
 EXPLICACION DE LOS BENEFICIOS (ESTA NO ES CUENTA)
 MY TOWN TX 78000
 COUNTY 000
 COUNTY 000
 BPN 000 00 A 00

RECIPIENT NUMBER	RECIPIENT NAME	PROVIDER OF SERVICE	EXPLANATION OF SERVICE	DATE OF SERVICE	PAID	STATE USE ONLY
200000201	CAROL JONES	BROWN A. DO	DOCTORS OFFICE VISIT/SERVICE	01-26-78	\$ 33.00	878031184
200000202	JANE JONES	BROWN A. DO	DOCTORS OFFICE VISIT/SERVICE	01-26-78	\$ 26.00	878031184
200000202	JANE JONES	XYZ PHARMACY	PRESCRIPTION NO. 111111	01-24-78	\$ 3.67	140289
200000202	JANE JONES	XYZ PHARMACY	PRESCRIPTION NO. 111112	01-24-78	\$ 3.92	140289
200000202	JANE JONES	GREEN R. MD	DOCTORS OFFICE VISIT/SERVICE	01-24-78	\$ 18.90	878026206
200000202	JANE JONES	GREEN B. MD	THERAPY	01-24-78	\$ 10.00	878026206
200000201	CAROL JONES	BLACK C. MD	DOCTORS OFFICE VISIT/SERVICE	01-13-78	\$ 48.00	878017184
200000201	CAROL JONES	RST PHARMACY	PRESCRIPTION NO. 000011	01-06-78	\$ 17.60	130716
200000201	CAROL JONES	RST PHARMACY	PRESCRIPTION NO. 000011	01-06-78	\$ 8.75	130716
200000201	CAROL JONES	HENRY D. DO	DOCTORS OFFICE VISIT/SERVICE	01-06-78	\$ 8.00	878013204
200000207	ROBERT JONES	EYE CENTER	EYE EXAMINATION	01-05-78	\$ 28.00	878016225

THIS IS NOT A BILL SEE INSTRUCTIONS ON BACK
 ESTA NO ES CUENTA INSTRUCCIONES EN EL REVERSE

INFORMATION HAS BEEN DE-IDENTIFIED

FIGURE 1: Explanation of Benefits

Texas Department of Human Resources



Margie Doe 2-000001
100 S. First
Anywhere, TX 78000

Date /Fecha. October 31, 1979

**Recipient Health Care Education Program
Enrollment Notification Letter**

**Aviso de Inscripción Para el Programa de
Entrenamiento en el Uso de Servicios Médicos**

Dear Recipient: Ms. Doe

Estimado Cliente:

Beginning

Comenzando el

November 1, 1979

your Medical Care Identification Card will not be mailed to you. You are still eligible for participation in the Medicaid Program. Before your present card expires, a Texas Department of Human Resources Recipient Health Care Education Program representative will tell you how to get your new card.

A review of your records indicates that you or a member of your family may need help in understanding how you can best use medical care services. The Department wants to give you this help through the Recipient Health Care Education Program.

Thank you for your cooperation with the Department representative who will contact you.

la Identificación para Servicios Médicos no se le va a mandar a usted por correo. Todavía califica para Medicaid. Antes de vencerse la Identificación que tiene ahora, un representante del programa de Entrenamiento en el Uso de Servicios Médicos del Departamento de Recursos Humanos de Tejas se comunicará con usted para decirle cómo obtener una nueva Identificación.

Revisando su caso notamos que posiblemente usted o un miembro de su familia necesite ayuda para aprender cómo utilizar los servicios médicos de la manera indicada. El Departamento ofrece esta ayuda por medio del Programa de Entrenamiento en el Uso de Servicios Médicos.

Contamos con su cooperación con el representante del Departamento que dentro de poco se comunicará con usted.

Sincerely /Atentamente,

Nurse Supervisor

Form T-3800
7-79

An Equal Opportunity Employer

Information has been de-identified

FIGURE 2: Notification

Texas Department of Human Resources



Margie Doe
100 S. First
Anywhere, TX 78000

2-000001

Date/Fecha: October 31, 1979

Appointment Letter

Aviso de la Cita

Dear Recipient: Ms. Doe

Estimado/Estimada Cliente:

Your Medical Care Identification Card for the month of

Usted puede obtener su Identificación para Servicios Médicos del mes de

November 1, 1979

can be obtained at the time and place shown below. Please bring this letter and your present Medical Care Identification Card with you when you come.

a la hora y en el lugar indicados a continuación. Favor de traer este aviso y la Identificación para Servicios Médicos que ahora tiene con usted cuando venga

Appointment Date/Fecha de la Cita November 7, 1979	Time/Hora 9:30 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	Place/Lugar Brown Building
Address/Dirección 1078 First Street		Telephone No./Teléfono 800-0000

If you cannot keep this appointment, please call the above telephone number for another appointment.

Si no puede venir a esta hora, hable, por favor, al número que se da arriba para que le den otra cita.

If you require medical services or prescriptions before the date of your appointment, use this letter in place of the Medical Care Identification Card. This letter is effective through your appointment date (see shaded area above).*

Si necesita servicios médicos o medicinas de receta antes de la fecha de su cita, este aviso le puede servir de identificación. No es válido después de esa fecha (la del lugar sombreado, arriba).*

If you have any questions or if you need your Medical Care Identification Card before the date of your appointment, please contact the Recipient Health Care Education Program representative at the above telephone number.

Si tiene alguna pregunta o si necesita su Identificación para Servicios Médicos antes de la fecha de su cita, comuníquese con la oficina del Programa de Entrenamiento para el Uso de Servicios Médicos. El teléfono es el que se da arriba.

Thank you for your cooperation.

Se le agradece su cooperación.

Nurse Supervisor

Nurse Supervisor/Enfermera Supervisora

* NOTE TO PROVIDER OF SERVICES: Please document on the back of this letter the name of recipient, date, your name, and type of service and the name of drug, dosage, and amount dispensed.

Form T-3801
7-79

Information has been de-identified

FIGURE 3: Appointment Letter

Explanation of Benefits (EOB) form and allows the recipient to discuss any questions or problems. Occasionally there are charges listed on the Profile or EOB form for services that the recipient or a family member state they did not receive. In such cases, the information is referred to the appropriate office for review.

The counselors also ask recipients about possible third party resources, which are then reported to the Third Party Resource (TPR) Section. TPR staff have indicated that information provided by the RHCEP has been of substantial benefit in the recoupment of Title XIX monies.

During this initial visit, the counselor makes a decision, based upon his/her findings, as to whether or not the recipient should continue further counseling sessions. If the decision is to continue the recipient's enrollment in the program, because of an apparent pattern of over-utilization, the counselor takes up the recipient's medical records books and issues the recipient the Medical Care Identification Card and a Monthly Medical Record Card (Figure 4), both of which are prominently imprinted with the word 'Education'. The counselor explains the use of the Medical Record Card, and the requirements of monthly counseling visits, during which they will review the services reflected on the Monthly Record Card and current EOB. At this time an appointment is made for the next counseling session. The first counseling session lasts about an hour; following sessions are 30-45 minutes depending on the recipient's needs.

The counselor completes, in duplicate, a Counseling Form (Figures 5 and 6) for each recipient case, stating all pertinent data, including results of the counseling session, any problems encountered, and recommendations. The original is sent to the State office for analysis and statistical purposes. The duplicate remains in the recipient's case record for review.

There is no coercive action toward the recipient to participate in the program. Those who do so receive the same service provided to all other Medicaid recipients. Those enrolled receive monthly counseling until they (1) show adequate improvement in the utilization of services, (2) demonstrate medical necessity, (3) move from the project area, or (4) are denied eligibility.

Except for recipients with documented medical necessity, most recipients stay in the program for six to twelve months. The decision for disenrollment of a recipient, based on improvement in utilization of services, is the function of the registered nurse super-

visor within the RHCEP unit. Following disenrollment, the recipient returns to the normal channel of Medicaid assistance. However, their use of services are monitored by computer generated printout for a period of six months.

Counseling and education of the recipients by professional staff is the key element of the program. Areas of teaching involve appropriate utilization of medical services, basic health care principles, importance of preventive health measures, as well as early diagnosis and treatment of disease, hygiene, nutrition, and sanitation. The needs of the individual determine the kind of education provided. The counselor makes referrals to community agencies and social service resources, as needed.

During counseling sessions emphasis is placed on the family's health and health needs, focusing on special problems. If a family visits the hospital emergency room for all its health care, the counselor will discuss the necessity of continuity of care and the expense of using the emergency room at times when they could call or see their regular doctor. The counselor explains that when the recipient has a regular doctor, he/she could call the doctor in case of an emergency and could receive direction as to the required care.

Emphasis is placed on the importance of having a primary physician and depending upon him/her for referrals. When advising recipients to select a primary physician, health education counselors discuss the possible problems of incompatible drugs. They discuss situations that can occur when several physicians prescribe without access to complete medical records. The counselor also takes this opportunity to stress the importance of following physicians' orders as directed.

The RHCEP counselor often has the opportunity to help with recipient/family problems—such as, caring for a chronically ill child, facing the decision to institutionalize a retarded or mentally ill child, discussing adolescent health problems, and preparing to enter or re-enter the job market. The counselor makes any necessary referrals—for example, to the Mental Health and Mental Retardation Center, Work Incentive Program, Texas Rehabilitation Commission for job training, and to the local school district or community college for assistance in preparing for the Graduate Equivalency Diploma. Relating to employment, several recipients have followed through on recommendations, found jobs, and have been removed from the welfare rolls.

Occasionally the recipients under-utilize health

RECIPIENT HEALTH CARE EDUCATION
COUNSELING FORM

CAT/CASE NO. 2-000001	CASE NAME DOE, Margie
--------------------------	--------------------------

REMARKS: 1st Visit

Date Enrolled: 4/5/78

Travel: Bus

Rides w/ friend

Enroll in Education Program. Collected old Texas Medical Assistance Books. Orientation given to Education Program. Issued Form 3086 and new Medical Record Card, with explanation of use by providers. Reviewed and verified EOB.

Margie is a 32-year old mother of five. Enrollment in Education Program due to her utilization of six different doctors. States that for many years she has seen Dr. Jones (OB/GYN) for all illnesses, and other doctors seen have been those referred by Dr. Jones.

States Dr. J. Brown, Jr. (Gen. Pract.) is their family doctor. However, prefers to take only the children. Dr. J. Brown, Sr. is alternate family doctor.

Dr. Jones monitors all of Margie's illnesses. She is a diabetic, takes medication daily, and maintains diabetic diet. Tests urine daily. Condition has caused frequent office visits and E.R. visits. In 12/77, during last hospitalization, Margie was informed of having a kidney disease, condition being terminal. Condition due to diabetes. Presently under the care of Dr. R. Smith (Urology). Is not on medication, but is to maintain 1200 calorie diet. She sees Dr. Smith every three months. Margie wanted a second opinion on condition and is undergoing extensive tests through Family Health Clinic, General Hospital. Due for final results 4/26/78. Margie has had hysterectomy due to recurring infections.

Emergency room visits made when diagnosis/procedures could have possibly been done in a private doctor's office, but family waited too long to obtain medical care. Did not realize importance of early treatment. Did not realize cost differences between E.R. visits and private doctor's office.

INJURIES: Margie-01, superficial injury, 2/22/77, caused in a fall. Mike-03, injury of 5/23/77, injury elbow and forearm, sustained in fall, playing. Bill-04, injury of 9/1/77, sprains and strains of foot, sustained in fall, playing. Roy-05, injury of 10/4/77, contusion, sustained in fall, cutting forehead. Chronic ulceration of penis, 3/14/77, due to infection. Joe-07, treated for many ant bites 6/25/77, fell into an ant's nest.

RECOMMENDATIONS:

1. Utilize services one private doctor depend upon his referral to other services if necessary.
2. Utilize services private doctor in lieu of E.R., except in cases of real emergency.
3. Advised early treatment for obvious illness to avoid complications, possible E.R. visits, hospitalization.
4. Stressed importance of keeping all Educational appointments.
5. Informed recipient to telephone for early appointment, if Form 3086 is needed prior to scheduled date.
6. Stressed importance of continuity of care.
7. Gave emotional support and encouragement.

Return for next visit May 5, 1978 at 3:00 p.m.

COUNSELING TIME 60 mins.

/s/ Counselor

Counselor

4-5-78

Date

Information has been de-identified

RECIPIENT HEALTH CARE EDUCATION
COUNSELING FORM

CAT./CASE NO. 2-000003	CASE NAME Martin, Mary
---------------------------	---------------------------

REMARKS: 6th. visit

Date enrolled: 7/18/77

Returned November Medical Record Card. Discussed utilization of medical services. Reviewed and verified EOB.

Ruby-06 and Doris-07, to Dr. Jones for sore throat. Three prescriptions filled. Judy-08, had an eye exam at school, and was referred to Dr. Joe Brown, Ophthalmology, for glasses.

Mary-01, has sore throat - will see Dr. Jones today. Mary's periods are still irregular, plans to see Dr. Smith 12/23/77. She is also thinking of having a tubal ligation. All services utilized appear to be medically necessary. Attempting to utilize services wisely.

Recipient was enrolled in Education Program 7/18/77 due to consistent utilization of medical services, visiting several doctors in same specialty. The problems have been corrected. Family is now utilizing services one family doctor, an alternate family doctor, and GYN specialist. Recipient realizes importance of early treatment, continuity of care, and has learned the meaning of medical necessity. Appears Education Program has been beneficial in this case.

RECOMMENDATIONS:

1. Reviewed appropriate means of utilizing medical services.
2. Emphasized utilizing private doctor's office in lieu of hospital E.R., whenever possible.
3. Stressed utilizing one doctor in the same specialty.
4. Discussed the meaning of "Medical Necessity."
5. Gave examples of situation/conditions for which use of E.R. is essential.
6. Advised of continued monitoring medical services utilization.
7. Advised of possible re-enrollment in Program.
8. Advised early treatment for obvious illness to avoid complications, possible E.R. visits, hospitalization.

Remove from Education Program. Re-issued Texas Medical Assistance Books.

COUNSELING TIME 30 minutes

/s/ Counselor

12-16-77

Information has been de-identified.

FIGURE 6

care, particularly in preventive services. The counselors encourage the recipients to seek appropriate treatment. They make referrals to such appropriate resources as immunization clinics, well baby clinics, and Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) services.

During each of the follow-up counseling sessions the counselor and recipient discuss any medical care since the last visit. The counselor reviews the previous recommendations and/or referrals and documents the action taken by the recipient. In some cases, the counselors find it necessary to make the same recommendations or referrals for several visits.

The counselors report that they are developing good rapport with the majority of the recipients. They report further that the education being provided has been beneficial in enabling recipients to handle their medical and health care problems more effectively. Patients enrolled in the health education program usually get interested in their own medical care. Counselors encourage patients to talk to doctors about their condition.

The registered nurses in the program all have years of clinical experience in health care. The counselors receive continuing education from the State office, other health education organizations, and regional training programs. Currently, information is being compiled for a handbook that will be used for future in-service training for all health education staff.

Evaluation techniques for the program currently include the use of two computer generated reports. The Recipient Health Care Experience Report (Table 4) and the Post-Disenrollment Report (Table 5) are furnished to management and field staff monthly.

The Recipient Health Care Experience Report is a summary that contains recipient case claim payment information shown in dollar amounts before and during enrollment, and a change in the monthly average, as well as an estimated net savings, or increase, for the case. For example, the Medicaid expenditures for one family of 3, were \$6,649 for a 12 month period (monthly average of \$554), prior to enrollment in the Health Education Project. Expenditures during six months of enrollment were \$307, or a monthly average of \$51. The estimated savings, based on the difference in the monthly average was \$3,017 for a six month period.

The Post-Disenrollment Report is a summary that contains recipient case claim payment information, before and during enrollment, as well as for six months after disenrollment. This report also reflects a change in the monthly average and an estimated net

savings, or increase, for the case. The zero dollar figures (Tables 4 and 5) reflect a lag in getting information, rather than the recipient's not using health services.

These reports are used to trace the progress of the case, and will indicate changes in patterns of utilization. If the recipient has reverted to old patterns of utilization, that will break the screening parameter and the recipient becomes eligible to re-enter the program.

The Recipient Health Care Experience Report, the Medical Recipient Profile, the Monthly Medical Record Card, and the Counseling Form comprise the information used for analysis and evaluation. These data reflect trends and patterns related to the recipient, providers, educational team techniques, and operational methods. An analysis of the trends will provide information demonstrating the most efficient methods of total operation of the project.

Summary

Although the Texas Recipient Health Care Education Program is a new concept for Medicaid programs, and there is not a large body of historical data available, analysis of the supporting data in use indicates that the program is effective in meeting its objectives.

Based on a projected utilization of medical services at the same level before recipients were enrolled in the program, the RHCEP resulted in cost avoidance of over \$8 million from March 1976 through August 1979. By counseling recipients identified as high utilizers of medical services, this program has reduced utilization and redirected these recipients toward the care they need. RHCEP staff hope eventually to expand the program to other areas of Texas, and to include new Medicaid recipients.

In a period of budget cuts, one indication of a program's success is the State legislatures' appropriating sufficient funds to continue. The appropriation for the RHCEP is \$478,239 for 1980 and \$502,369 for 1981.

Health care resources and Medicaid funding are limited. Yet, the demand for services is unlimited. There are basically only two options for dealing with this: increase the supply, which is fiscally infeasible; or limit the demand. Some States are limiting demand by cutting back on services provided. Texas offers another possibility: decrease demand by educating the patient to select health services wisely.

CASE	NAME	NO IN FAMILY	BEFORE ENROLLMENT TOTAL NO OF MONTHLY CLAIMS-NO	AVERAGE	MONTHLY	NO OF MONTHLY ENROLLMENTS	TOTAL CLAIMS	NO	AVERAGE	MONTHLY	CHANGE IN MONTHLY AVG	TOTAL ENROLLED	TYPE	
3		3	\$5,673.68	12	\$472.80	00	\$5.00	00	\$5.00	\$5.00	\$5.00	\$5.00	01/78	C
4		4	\$2,532.25	12	\$211.02	06	\$733.97	06	\$122.32	\$88.70	\$88.70	\$532.20	07/77	-C
6		6	\$3,724.02	12	\$310.33	01	\$148.84	01	\$148.84	\$161.49	\$161.49	\$161.49	12/77	C
4		4	\$19,846.68	12	\$1,653.89	01	\$10.00	01	\$10.00	\$1,643.89	\$1,643.89	\$1,643.89	12/77	C
6		6	\$4,003.35	12	\$333.61	05	\$217.48	05	\$43.49	\$290.12	\$290.12	\$1,450.60	08/77	C
6		6	\$975.13	12	\$81.26	00	\$5.00	00	\$5.00	\$5.00	\$5.00	\$5.00	03/78	C
6		6	\$4,457.88	12	\$371.49	00	\$5.00	00	\$5.00	\$5.00	\$5.00	\$5.00	02/78	C
6		6	\$2,466.53	12	\$205.54	08	\$1,511.29	08	\$188.91	\$16.63	\$16.63	\$133.04	05/77	C
4		4	\$16,892.02	09	\$1,210.22	01	\$47.00	01	\$47.00	\$1,163.22	\$1,163.22	\$1,163.22	12/77	C
6		6	\$2,565.14	12	\$213.76	00	\$5.00	00	\$5.00	\$5.00	\$5.00	\$5.00	03/78	C
6		6	\$9,523.23	12	\$793.60	01	\$297.76	01	\$297.76	\$495.84	\$495.84	\$495.84	12/77	C
4		4	\$3,259.70	12	\$271.64	00	\$5.00	00	\$5.00	\$5.00	\$5.00	\$5.00	01/78	C
3		3	\$1,020.50	12	\$85.04	05	\$575.44	05	\$115.08	\$30.04	\$30.04	\$150.20	08/77	C
5		5	\$6,875.44	12	\$572.95	01	\$42.24	01	\$42.24	\$530.71	\$530.71	\$530.71	12/77	C
2		2	\$1,846.58	12	\$153.88	00	\$5.00	00	\$5.00	\$5.00	\$5.00	\$5.00	03/78	C
8		8	\$5,598.15	12	\$466.51	04	\$1,183.23	04	\$295.80	\$170.71	\$170.71	\$682.84	09/77	C
6		6	\$2,811.55	12	\$234.29	09	\$3,435.39	09	\$381.71	\$147.42	\$147.42	\$1,326.78	04/77	C
6		6	\$2,714.96	12	\$226.24	00	\$5.00	00	\$5.00	\$5.00	\$5.00	\$5.00	04/78	A
10		10	\$10,759.62	12	\$896.63	04	\$3,850.37	04	\$962.59	\$65.96	\$65.96	\$263.64	09/77	C
9		9	\$13,051.62	12	\$1,087.80	04	\$2,819.14	04	\$704.78	\$383.02	\$383.02	\$1,532.08	09/77	C
4		4	\$7,040.40	12	\$586.70	01	\$105.72	01	\$105.72	\$480.98	\$480.98	\$480.98	12/77	C

2 000001 MARGIE LOE

INFORMATION HAS BEEN DE-IDENTIFIED

TABLE 4

PREPARED ON 05/07/78
 FOP 03/01/77 - 02/28/78

TEXAS DEPARTMENT OF PUBLIC WELFARE
 RECIPIENT HEALTH CARE EDUCATION EXPERIENCE
 POST-ENROLLMENT

NR421-01
 PAGE 12

COUNTY 000 ANY PLACE

CASE	MO. IN FAMILY	BEFORE ENROLLMENT MONTHLY AVG	6 DURING TOTAL CLAIMS	7 MONTHLY AVERAGE	8 AFTER TOTAL CLAIMS	9 NO. OF MONTHLY AVERAGE	CHANGE-IN MONTHLY AVG	TOTAL TYPE
	4	\$246.25	\$2,280.30	09 \$253.83	\$1,142.18	06 \$190.36	\$63.47-	\$267.19- H
	4	\$133.35	\$123.95	02 \$61.99	\$3.00	06 \$3.00	\$61.99-	\$942.88- H
	4	\$735.42	\$581.00	03 \$187.00	\$216.34	06 \$36.03	\$150.95-	\$5,841.43- 0
	4	\$355.24	\$6,195.27	08 \$774.40	\$1,003.78	06 \$167.29	\$607.11-	\$2,225.58 H
	4	\$400.70	\$151.04	06 \$25.17	\$3.00	01 \$3.00	\$25.17-	\$2,683.41- 0
	3	\$406.69	\$2,225.57	05 \$445.11	\$159.96	06 \$26.66	\$418.45-	\$2,085.53- H
	3	\$339.53	\$1,589.81	05 \$317.76	\$948.98	04 \$237.24	\$60.52-	\$518.04- 0
2 000001 MARGIE DOE	4	\$420.88	\$1,409.41	05 \$281.88	\$117.59	02 \$58.79	\$223.09-	\$1,419.18- 0
	5	\$260.98	\$389.47	04 \$97.36	\$3,403.15	06 \$567.19	\$469.83	INC \$1,182.80 H
	6	\$594.79	\$1,046.65	04 \$261.66	\$1,665.92	06 \$277.65	\$15.99	INC \$3,135.40- H
	3	\$392.03	\$3.00	01 \$3.00	\$40.67	06 \$6.77	\$6.77	INC \$2,703.54- H
	3	\$485.01	\$1,483.15	04 \$370.78	\$1,362.97	06 \$227.16	\$143.62-	\$2,004.00- H
	2	\$378.94	\$2,683.34	06 \$447.22	\$299.67	06 \$49.94	\$397.28-	\$1,564.32- H
	6	\$316.91	\$578.01	05 \$115.60	\$2,367.90	06 \$394.65	\$279.05	INC \$540.10- H
	6	\$265.43	\$3,554.80	08 \$444.35	\$1,386.57	06 \$217.76	\$226.59-	\$1,145.34 H
	4	\$218.77	\$225.01	05 \$45.00	\$423.66	05 \$84.73	\$39.73	INC \$1,539.10- 0
	2	\$200.90	\$236.93	04 \$59.23	\$217.02	06 \$36.17	\$23.06-	\$1,555.10- H
	4	\$299.09	\$114.20	03 \$38.06	\$521.62	06 \$86.93	\$48.87	INC \$2,063.25- H
	4	\$536.46	\$126.80	04 \$31.70	\$283.48	06 \$47.24	\$15.54	INC \$4,954.40- H
	8	\$272.14	\$175.00	04 \$43.75	\$287.10	06 \$47.85	\$4.10	INC \$2,259.30- H

INFORMATION HAS BEEN DE-IDENTIFIED

TABLE 5

Conclusion

The Recipient Health Care Education Program is resulting in positive benefits to the recipients and the State. The primary benefit to the recipients is an improved awareness of their health care needs, and the learning of appropriate measures to follow in obtaining continuity of care in the mainstream of medical care, each with a personal physician. Education of recipients is the main thrust of this program and any cost saving is an added benefit.

Edna Faye Campbell, R.N., Director of the Texas Recipient Health Care Education Program, has been involved in the program since its beginning; first at the field level and then through a leadership role in the State office. Ms. Campbell received her diploma from the Hermann Hospital School of Nursing, Houston, in 1960 and was registered by Board Examination. She received her B.A. in Administration from St. Edwards University in December 1978. She has been employed by the Department of Human Resources Medical Programs since October, 1971.

QUALITY DRUG CARE AND COST CONTAINMENT IN LONG TERM CARE FACILITIES

by PHILLIP J. LEVINE, PH.D.

Introduction

Although drug costs represent less than 10% of the national Medicaid budget, management of drug utilization is a critical element in evaluating Medicaid and other government programs providing health care and services, particularly to the elderly. Poor drug management minimizes the quality and effectiveness of health care and contributes to expensive institutional stays. Health Systems Design Inc., in a study conducted in nine hospitals, concluded that 4 to 7% of all discharges reflected morbidity caused or exacerbated by inappropriate drug therapy.¹ The melding of quality drug care and cost containment techniques, through a well managed drug program, are paramount to assure sound long term care (LTC) management in the Medicaid program, and are crucial in individual patient care management for residents of LTC facilities, including skilled nursing facilities (SNFs) and intermediate care facilities (ICFs).

Within public health care programs, there is a wide array of professionals who can and should be involved in drug management. These include: the Medicaid agency's medical review (MR) and independent professional review (IPR) teams who annually review the care and needs of LTC patients; the agency's consultant pharmacist whose responsibility is to advise the agency on drug related matters; the surveillance and utilization review (SUR) unit of the Medicaid Management Information System (MMIS) staff which can and does produce data on uses and abuses of all services, including pharmaceutical, through therapeutic indicators, profiles and exception criteria; the survey agency which determines whether LTC facilities are qualified to provide care to Medicaid and Medicare recipients; the LTC facility staff, including their consultant pharmacist, who are intimately involved in developing and reviewing the patient's care plan;

and the attending physician who initiates treatment. All of these professionals can benefit from increased knowledge of drug management and directly influence not only the quality of patient care but the cost as well.

Management Techniques

It is suggested that professionals involved in drug management consider two complementary forms of drug evaluation. The first technique involves the management procedures listed in Figure 1.

FIGURE 1: Management Techniques

- Creation of a statistical drug use baseline
- Use of drug formularies
- Use of generic purchasing
- Purchasing in bulk quantities
- Minimizing waste (unit dose)
- Reduction of prescriptions per patient

Kubica described the need for determining a statistical base from which drug costs (use and administration) for a facility can be evaluated.² Kidder and other evaluators of drug use in LTC facilities have also recommended the use of statistical data to determine drug costs in nursing homes.^{3,4} Baseline items helpful for evaluation of drug utilization include: (1) cost of drugs per patient per day; (2) type and quantity of the 25 most commonly prescribed drugs; (3) monthly dollar value of inventory of prescription and non-prescription drugs in a facility; (4) administrative costs of pharmacy service, drug monitoring and evaluation, and (5) 60 day summation of resident drug

¹ "Impact of Inappropriate Drug Therapy on Hospital Admission Study," *Journal for Medicaid Management*, Vol. 1, No. 3, Fall 1977, p. 82.

² Kubica, A. J., *Current Concepts in Hospital Pharmacy Management*, p. 7, Summer, 1979

³ Kidder, S. W., *American Pharmacy*, Vol. NS 18, No. 7, p. 18, July, 1978

⁴ Cooper, J. W., *American Pharmacy*, Vol. NS 18, No. 7, p. 25, July, 1978

usage. These activities can be performed in a facility under the direction of the consultant pharmacist. The State agency is also capable of producing baseline data on these and more items through its SUR system; data which can then be reviewed to determine patterns of excess, abuse and overutilization.

The listing of the most commonly prescribed drugs in a facility can be used for both management and therapeutic evaluative needs. From a listing of the 25 most commonly prescribed drugs, a facility's medical staff might agree on a modified formulary system, to be used for both the prescribing and purchase of drugs. Certainly a list of the 25 most commonly used non-prescription drugs, e.g. mineral oil, Milk of Magnesia, antacids, etc., could be used to purchase in bulk and supply to residents, where appropriate, with cost savings to all.

Determining 25 Commonly Used Drugs: A simple technique offered to increase the cooperative evaluation of drug therapy is to obtain a listing of the 25 most commonly employed prescription drugs in a facility. This can be done by a facility utilization review or staff committee or a PSRO (Professional Standards Review Organization), if the facility is under review of a PSRO. It can also be accomplished by producing a special report through the SUR or MMIS. From the listing, physicians can review, for nurses and pharmacists, their impressions of drug effects, side-effects and patient progress. From such a listing of drugs, physicians can further describe the five or ten most common conditions requiring the drug therapy. These listings, which typically include congestive heart failure, high blood pressure, diabetes, arthritis, malignancy, gout, etc., can be used to describe appropriate drug therapy and emergency precautions which doctors should advise. When the most common disease/condition listing has been supplemented with overlooked diseases, the medical staff now may easily and continuously supplement diagnosis with drug monitoring. Doctors should be encouraged to provide the nursing and pharmacy staff with their impressions of: (1) maximum dosages for treatment of certain conditions; (2) desired length of therapy; (3) frequency of monitoring and (4) emergency procedures common to the condition and drugs utilized to treat it.

By developing a listing of the 25 most commonly used drugs and the ten or so most common conditions/diseases, in-service programs could be devoted to discussions of these therapeutic barometers. The drug list can orient medical staffs and administrators to

actual problems affecting the facility. This approach will be far more beneficial to direct care staff than in-service programs devoted solely to philosophical considerations of patient care. This concept could be expanded by the State agency or facilities or both, if survey teams identified training needs for a group of facilities. Cooperative in-service programs could be designed to meet the needs of several facilities. Such cooperative training would maximize its effectiveness, minimize duplication of efforts and serve as cost-containing to all facilities as well as the State.

Listing most common conditions or diseases may alert drug managers to the need for assessing patient care, the use or misuse of laboratory tests and other diagnostic procedures. Ultimately the need would be identical or similar for the reduction of drug use on a per patient basis in most facilities. All parties involved could then embark on appropriate administrative strategy to bring this about.

Therapeutic Techniques

The second technique for drug care management involves therapeutic considerations. Often described as drug utilization review (DUR) and advocated for SNFs, the technique described in Figure 2 is applicable also to ICFs and similar LTC facilities.

FIGURE 2: Therapeutic Techniques

Evaluation of a patient admission diagnosis and drugs
Preparation of chronologic patient drug records
Evaluation of patient drug appropriateness
Monitoring for prescription drug errors
Minimizing adverse drug reactions (ADRs)
Minimizing drug interactions (DIs)

Using the therapeutic barometers listed in Figure 2, costs can be significantly reduced and resident health care can be improved. Many of the professionals responsible for drug management can perform these evaluative techniques. Some State Medicaid agencies have SUR units that may have the capacity to use therapeutic indicators to produce profiles; the pharmacist consultant can review questionable situations. The MR/IPR team can review patient medical records to determine whether these situations exist, and the survey agency can determine whether a facility's procedures are actually guarding against such situations.

The use of many drugs increases the possibility of adverse drug reactions (ADRs) and drug interactions

(DIs). In an effort to reduce drug problems in the elderly, the guidelines in Figure 3 are suggested to those concerned with drug management.

FIGURE 3: Guidelines for Drug Evaluation

- Take a careful patient drug history
- Maintain and evaluate chronologic drug records
- Know, observe and document drug effects and patient outcomes
- Develop a drug monitoring procedure which considers the relationship between dose and frequency, dose and patient weight, condition, liver and kidney status
- Develop a stop order policy.

Transcribing errors and the utilization of two drugs of the same pharmacologic class represent poor management and therapeutic difficulties commonly documented in drug records of Medicaid patients. Unwarranted drug usage, failure of the nursing staff to comply with times of administration, are the bane of quality drug therapy. In the following examples, drug duplication exists and may cause toxicity: (The asterisk indicates duplicate drugs.)

Patient H-3	Patient J-2
*Purodigin	Orinase
Lasix	Digoxin
Sopor	*SerApEs
Mandelamin	2 g. Sodium diet
MOM	Zyloprim
*Lanoxin	*Reserpine
Hydrodiuril	Dalmane

Health Changes in the Elderly: The elderly are particularly sensitive to drug action and reaction because of declining physiologic and psychologic health. More drugs are also prescribed to the elderly because of these same declining health characteristics.

Figure 4 lists common physiologic and psychologic changes which occur in the elderly and indicates changes which should be monitored by medical and non-medical personnel in a facility as well as the MR and survey teams.

We have provided the listing in Figure 4 because drugs are often prescribed to "correct" some of these difficulties. Sleeping pills, for example, are commonly prescribed for a group of patients who typically need less sleep. In addition, many of the "noticeable changes" listed in Figure 4, may be caused by drugs. This makes assessing the total patient in terms of cause and effect of drug interactions essential to quality care. Non-medical staff members must be encouraged to advise medical staff of resident conditions; this staff should assist the health professionals in monitoring resident health progress. Such cooperative activities may be checking the feet and toes of diabetic patients, or noting whether hypertensive (high blood pressure) patients have difficulty in getting out of bed without dizziness or falling.

State program managers may want to design seminars or provider education campaigns to encourage doctors to advise nurses and pharmacists of the progress they expect when prescribing drugs as part of treatment. Only by doctors describing barometers of progress can allied health personnel supplement medical therapy.

Adverse Drug Reactions: These are common in the elderly because of lowered resistance to drug effects and the large number of drugs often used in the treatment of the aged patient. The most common ADRs may often reflect toxicity of drug usage and are serious results of drug therapy. The most common ADRs are skin problems, conditions complicated by the fact that most aged skin is wrinkled, pruritic, seborrheic and keratotic. Most drugs will cause skin conditions, as evidenced by the listing in Figure 5. Physicians will often challenge a patient to determine causal relationships between drug usage and skin eruptions.⁵ This is a particularly hazardous situation with the elderly patient and should be discouraged. Non-medical workers should be alerted to the facts that skin reactions may occur slowly and without typical symptoms. Those skin conditions which should be monitored include changes in facial expression (mask-like or wax-like), unusual pigmentation of the skin (blues and blacks), itching, hives and the formation of wheals, rashes and similar skin eruptions.

⁵ Martin, E. W., Hazards of Medication, J. B. Lippincott Co., Phila (1971) p. 345

FIGURE 4

Some Common Changes and Their Affects in the Aged

Organ System	Noticeable Changes
Heart	Increased blood circulation time Anemia Swelling and edema Speech impairment Organic brain syndrome
Gastrointestinal Tract	Less acid in stomach Difficulty digesting food Constipation Gall bladder disease
Muscles/Bones	Fractures Osteoarthritis Rheumatoid Arthritis
Lungs	Shortness of breath Easy fatigueability Chronic bronchitis Emphysema
Skin	Loss of subcutaneous tissue Swelling and pain Skin color changes Wrinkling of skin Baldness Seborrhea Decreased skin secretions Dryness of skin Senile pruritis
Hormones	Nervous system difficulties Loss of libido Fatigueability Muscle weakness Diabetes Food and leg problems Eye problems Kidney problems
Nervous System	Dementia Psychiatric disorders Parkinsonism
Body as a Whole	Responds slower to illness Cramps Lethargy Susceptible to infections Less need for food Obesity Less need for sleep Loss of teeth and gum problems Loss of self-image

FIGURE 5: Some Common Skin Conditions Produced by Drugs

Some Drugs Which Cause Itching	
Arsenic	Iodides
Insulin	Mercurial Diuretics
Sleeping Pills	Penicillins
Narcotics	Reserpine
Quinine	Sulfa Drugs
Some Drugs Which Cause Hives	
Aspirin	Iodides
Antibiotics	Mercurials
Corticosteroids	Narcotics
Digitalis	Butazolidin
Heparin	Quinines
Insulin	Reserpine
	Thorazine

Photosensitizing adverse drug reactions, e.g., skin darkening reactions, are caused by numerous drugs, as listed in Figure 6. Such sensitivity should be suspected when residents are exposed to sunlight, or light complected patients exhibit skin darkening.

Numerous lists and references concerning adverse drug reactions are available to the interested drug

manager. In addition to the widely employed Physicians' Desk Reference (PDR) and the drug package inserts available from a pharmacist consultant, these authoritative references are recommended:

AUTHORITATIVE REFERENCES—ADRs

- (1) *AMA Drug Evaluations*
Publishing Sciences Group, Inc.
Acton, Massachusetts
- (2) *Facts and Comparisons*
Facts and Comparisons, Inc.
1100 Oran Drive
St. Louis, Missouri 63137
- (3) *Formulary Service*
American Society of Hospital Pharmacists
4630 Montgomery Avenue
Washington, D.C. 20014
- (4) *The Medical Letter*
56 Harrison Street
New Rochelle, N.Y. 10801
- (5) *Hazards of Medication*
Eric W. Martin, Editor
J.B. Lippincott Co.
Philadelphia, PA

**FIGURE 6
Photosensitizing Drugs**

Achromycin V	Fulvicin	Povan
Akrinol	Gantanol	Procaine
Aldactazide	Gantrisin	Psoralens
Aldomet	Gold Salts	Quinines
Aldoril	Grifulvin	Renese
Antihistamines	Grisactin	Retin-A
Aventyl	Griseofulvin	Septra
Azolid	Hydrodiuril	Sparine
Bactrim	Librium	Sulfas
Barbiturates	Methotrexate	Sumycin
Benadryl	Minocin	Temaril
Butazolidin	Naqua	Tetracyclines
Compazine	Naturetin	Thiazide Diuretics
Dartal	NegGram	Thorazine
Declomycin	Norpramin	Tofranil
Diabinese	Oretic	Tolinase
Dilantin	Orinase	Zetar Emulsion
Diuril	Panmycin	
Dymelor	Phenergan	
Enduron	Phenothiazines	
Esidrix		
Fluorouracil		

Drug managers should encourage understanding of the action and adverse reactions of the major classes of drugs used in the elderly. Figure 7 (the final page of this article) reviews five classes of these drugs and is provided to serve as a guide for drug monitoring.

Based on our experience with LTC patients, we have tried to synopsise techniques to assure good management of a drug program. It is important, we believe, in a public health program such as Medicaid, that drug management be viewed not solely from the caregiver viewpoint but rather from that of all concerned. From the funding agency with its program responsibilities, through nursing staff with their immediacy to the patient, to the physician as "director" of the patient care and the pharmacist as advisor/consultant—all are responsible for quality drug management. All can make the difference.

Conclusion

No attempt has been made, nor should any be inferred, that drug evaluation of the geriatric patient is

easy or can be uniformly applied to medical treatment. Physicians are clearly responsible for diagnosing the patient's condition and prescribing a therapeutic treatment and medication regimen. Nurses and pharmacists are equally responsible for carrying out the regime, including administering and dispensing medication. Quality drug care is a cooperative effort among a wide array of health and medical professionals involved in managing a health care program. There are far too many factors affecting quality drug management for a single health professional to attempt to manage it all.

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FIGURE 7

A Brief Review of Major Classes of Drug Substances Utilized in Geriatric Drug Therapy.

CARDIOVASCULAR

Digitalis

Never leave at bedside for self-administering or confuse with drugs, like nitroglycerin, which are used for angina.

ADRs—Lack of appetite, drowsiness, vomiting, diarrhea, lethargy, marked confusional states, visual disturbances

DIs— Potassium sparing diuretics, phenobarbital and other barbiturate "sleepers" and antiepileptics

ANTIDEPRESSANTS

Tricyclics (Tofranil, Elavil, Sinequan, Aventyl)

May take several weeks before effects are noted.

ADRs—dryness of mouth, constipation, urinary retention, dilated pupils, flushing and warm skin, hypotension, coma and depressed respiration, seizure, involuntary movements of face and buccal muscles (twitching), difficulty in standing up or fainting in crowded room (Orthostatic hypotension)

DIs— Amphetamine stimulants, epinephrine, isoproterenol, nasal decongestants, cough and cold preparations, barbiturate sleepers

DIURETICS

Thiazides (Diuril, Esidrix, Exna, Saluron, Enduron, Naqua, Renese, Hygroton)

ADRs—Loss of potassium, cramping, confusion, gout-like attacks, skin rash formation, problems with pancreas

DIs— Gentamicin and aminoglycoside antibiotics, Loridine, Digitalis, Lithium, Chloral Hydrate

Furosemide—Lasix

ADRs—Dehydration, loss of potassium, cramps in large muscles, gout-like attacks, skin rash formation, circulatory collapse, blood difficulties

DIs— Digitalis, corticosteroids, Lithium, Chloral Hydrate

ANTIHYPERTENSIVES

Thiazides—see Diuretics

Propranolol—Inderal

ADRs—Reduced exercise tolerance, GI difficulties, breathing difficulties, congestive heart failure

DIs— General anesthetics, Ismelin, Haldol, Insulin, Orinase, other oral hypoglycemics, Dilatin, Priscoline, Phenothiazines

Reserpine—Serpasil, SerApEs

ADRs—Psychic depression, nightmares, nasal stuffiness, GI problems, impotence, heart difficulties

DIs— see Propranolol above

Comment—Reserpine containing drugs are poorly suited to geriatric drug therapy.

Guanethidine—Ismelin

ADRs—Diarrhea, orthostatic hypotension, sodium and water retention, may aggravate bronchial asthma, heart problems

DIs— Cold and cough preparations, Tricyclics, phenothiazines, increases effects of oral hypoglycemics

TRANQUILIZERS

(Manic Depression—Schizophrenia)

Phenothiazines—Thorazine, Trilafon, Prolixin, Permitil, Sparine, Mellaril, Compazine, Stelazine

ADRs—Marked sedation, postural hypotension, blurred vision, nasal stuffiness, dry mouth, delayed ovulation, urinary retention, (especially in men with prostatic enlargement), skin rashes, facial twitching (tardive dyskinesia) eye changes

DIs— Ismelin, Levodopa, barbiturates, narcotics, alcohol



MEDICARE BENEFICIARY SERVICES AND INFORMATION PROGRAMS

by JUDITH A. BLANCHARD

Introduction

In the Spring of 1978, some 77 enthusiastic volunteers in Dallas attended one of five two-day training sessions on Medicare reimbursement procedures. These volunteers are special in that they are retired, elderly persons who now serve as "beneficiary aides" in hospitals, churches, and community centers. They provide up to date information and guidance to other elderly persons about Medicare: how to file claims, benefits covered by the program, and how to appeal a claim.

The Dallas beneficiary aide program is one of several volunteer programs now in operation across the country. An estimated 100 pilot programs are located in diverse areas including Hickory, N.C., Baltimore, Md., and Monterey, Cal. Since 1976, the Medicare Office of Beneficiary Services and HCFA Regional Offices have worked with non-profit organizations, such as the American Association of Retired Persons, the National Council of Senior Citizens, and the Retired Senior Volunteer Program, developing and coordinating these programs.

Why Beneficiary Aide Programs?

The aide programs began in the Spring of 1977 when the American Association of Retired Persons and the National Council of Senior Citizens recognized the need to help elderly persons file Medicare claim forms and to make elderly persons aware of program benefits.

A profile of Medicare beneficiaries shows that there are 25 million persons enrolled in the program. Over 90% of the beneficiaries are elderly persons. As of 1975, 2.1 million were disabled persons under age 65, while 9,000 were end stage renal disease patients. The Medicare population is growing older. In 1966 the median age was 71.8, but in 1975 the median age was 73. Approximately 40% of the enrolled population is over 75. Women comprise 59% of all enrol-

lees.¹ In 1976, an average of 5.1 claims was filed per beneficiary.² Data show that beneficiaries now use more medical services than when Medicare first started. In 1967, 35% of beneficiaries received Medicare reimbursement under Part A hospital insurance or Part B outpatient medical insurance, while in 1975 over 50% received reimbursement.³ For Part B of Medicare, reimbursement averaged \$592 per person served in 1967, and increased to \$917 in 1975.⁴

Between 1970-1977, the percentage of elderly persons in the United States increased 17.7%, as compared to the general population increase of 9%, indicating steady growth in the number of elderly persons. The elderly are frequent users of medical services. Persons over 65 average 6.9 physician visits per year versus 4.7 for those under age 65. In 1976, about 39% of older persons were limited in a major activity, such as work or housekeeping, due to chronic disease.⁵ Both transportation difficulties and their own infirmities complicate elderly persons' attempts to obtain accurate Medicare information from Social Security district offices or Medicare insurance carriers.

Because need for beneficiary aid programs is expected to continue to grow, HCFA plans to have Medicare carriers handle beneficiary inquiries rather than Social Security district offices. To promote this change, HCFA installed toll free lines in carrier offices for beneficiaries, listed in the phone book under "Medicare." When toll free lines are installed by a carrier, TV and radio spots inform beneficiaries of the service. Also, SSA local offices ask beneficiaries in the future to use the toll free lines for any questions or difficulties.

Another factor increasing beneficiary difficulties is the decline of physicians on "assignment"—those accepting direct Medicare reimbursement for outpatient services. The proportion of assigned claims has steadily dropped since 1970. The net assignment rate was 61.5% in 1969, and fell to 51.8% in 1975.⁶ In 1978, assigned claims accounted for 48% of all claims paid by Medicare.⁷ One reason for the drop

in the assignment rate may be the increased percentage of claims and charges that are reduced by Medicare carriers.

As fewer physicians accept assignments then, beneficiaries must become involved in the reimbursement process. According to a March, 1979 HEW Inspector General's Report, Medicare beneficiaries whose physicians don't accept assignment experience great difficulty.⁸ For an unassigned claim, the beneficiary usually files the claim and is required to fill it out. Also, the beneficiary must pay the difference between the amount Medicare reimburses for physician services, based upon 80% of the "reasonable charge," and the actual physician charges, which are higher. To encourage physician assignment, HCFA has demonstration projects in the early planning stages to experiment with various reimbursement mechanisms.

The need for beneficiary programs is evidenced by beneficiaries' lack of knowledge of the Medicare system. HCFA statistics show that of those claims submitted to Medicare by elderly persons, payment on almost 70% is reduced.⁹ The major reasons for reduction include improper completion of the claim form by beneficiaries, or incomplete information about the service from either the physician or the beneficiary. Despite the significant number of reduced claims, beneficiaries appeal only 2-3% of their claims. Of those claims that are appealed, however, over 50% result in partial or full reversal.¹⁰

During the summer of 1978, the American Association of Retired Persons/National Retired Teachers Association conducted a telephone survey of over 300 members. The results of the study indicated that 80% of those interviewed were satisfied with Medicare. The survey also indicated that beneficiaries failed to appeal Part B claims when they received less than expected, because they felt it would do no good or that little could be done to change the carrier's determination. In fact, less than half of the beneficiaries interviewed were aware of their right to appeal a claim.¹¹

Program Goals and Advantages

The goals of beneficiary aide programs are to help elderly persons with Medicare by answering their questions, clarifying program benefits, helping them fill out claims forms, and informing them of their right to appeal reduced or denied claims.

Aides assist beneficiaries with both Parts A and B of Medicare. Part A is usually quite simple for the beneficiary. Either the participating hospital or skilled

nursing facility fills out the Medicare claim form and is directly reimbursed by Medicare. Part B causes difficulties for beneficiaries since they have to understand program benefits in order to complete the claim form. Because of these difficulties, the program is directed to helping beneficiaries with Part B, although aides also answer questions about Part A, such as available benefits. The aides know how to deal with the "red tape" of Medicare, how to resolve problems and whom to contact at Social Security district offices or at the Medicare carrier.

The program offers advantages to both aides and users. It provides elderly persons with someone their own age they can relate to and someone who can understand their personal situation. For aides, the program provides an opportunity to engage in a constructive activity during their retirement years, in a program with their peers. Social Security office managers support beneficiary aide programs because of these humane benefits and because they will reduce the number of Medicare beneficiaries who may make a possibly laborious and unnecessary trip to the SSA local office. Taxpayer funds may also be conserved because aides can provide better education and training to the beneficiaries of the program; this should in turn lead to more cost effective and efficient processing and reduced reprocessing of claims.

Program Development

A beneficiary aide program is initiated when a non-profit, volunteer organization contacts HCFA and asks for help in developing an aide program. While HCFA has a limited role in developing beneficiary aide programs due to the lack of staff in its Regional Offices, HCFA does participate by offering advice to organizations about potential volunteer sites and helping to train volunteers.

First, the non-profit organization selects the location to develop a beneficiary aide program. Sites for the aide program are chosen in hospitals, public libraries, Title III nutrition centers funded under the Older Americans Act, and churches. The organization then recruits elderly volunteers through its own ranks and contacts. The volunteers are trained by both HCFA and the area's Medicare carrier and the training lasts from two to four days. In some beneficiary aide programs, volunteers are given a one to two day follow-up training session after a three to six month period. Obviously, the necessary component of all beneficiary aide programs is cooperation between volunteers, Medicare carriers, and sites.

The format for the volunteer training session varies by region, since the sessions are jointly sponsored by the local Medicare carrier and the HCFA Regional Office. The Dallas training program consisted of five training sessions, each with 10 to 19 volunteers in attendance. During the training the volunteers received a volunteer manual, Medicare pamphlets, a list of Medicare premium charges, and the phone numbers of the Medicare carrier and Social Security district offices in the area. The volunteer manual explains how to properly complete a claim form, Medicare charges, and contains a sampling of carrier computerized letters to beneficiaries, as for example, a letter asking a beneficiary for more information. The training session sponsored by the HCFA Dallas Regional Office included the following topics: confidentiality requirements, Medicare coverage and benefits, the Part B claims process, and Medicare questions frequently asked by beneficiaries. Using visual aids, the Regional Office staff taught volunteers how to fill out the Medicare Part B claim form. At the end of the training session, aides had actual work problems to solve, similar to those they might encounter in helping a beneficiary.

Evaluation of the Dallas Medicare training session revealed that volunteers were quite positive about the training offered by HCFA and Texas Blue Cross/Blue Shield. Some 72% of the trainees felt that their knowledge about Medicare was "great" or "very great," and all except four of the 77 trainees indicated

they were either "very confident" (51%) or "somewhat confident" (44%) of their ability to counsel Medicare claimants.

Volunteers participating in the Dallas program represent retirees from a variety of professions. Thirty-three percent characterized themselves as professional/technical workers, while the remainder were primarily in clerical or managerial professions. Most persons were involved in professions requiring office work rather than manual labor. Approximately 40% of the volunteers have previous volunteer counseling experience.¹²

Current Beneficiary Aide Programs

HCFA Regional Offices estimate that there were about 1500 volunteers participating in beneficiary aide programs as of July 1979. Although all the projects share the same goals, they differ in the type of volunteers and sites utilized, and in program operation. For instance, Dade County, Florida has Medicare aides who speak both Spanish and English. In four HCFA regions, hospital auxiliary volunteers are trained in Medicare procedures in addition to their other duties. A Long Island, N.Y. hospital project is one of the first in the country to have volunteers trained in both Medicare and Medicaid procedures. Table 1 shows the estimated number of active volunteers in each region, and the sites where volunteers are located.

TABLE 1: HCFA Regional Data on the Number of Active Volunteers and Volunteer Sites

<i>Region</i>	<i>Number of Active Volunteers^a</i>	<i>Types of Sites</i>
Boston	228	Hospitals, Title III Nutrition Centers
New York	175	Hospitals, Title III Nutrition Centers
Philadelphia	7	Hospitals
Atlanta	604	City Halls, Public Libraries, Shopping Centers, Title III Nutrition Centers, Retirement Condominiums, Hospital Emergency Rooms
Chicago	51	Title III Nutrition Centers, Community Centers, Private Residences
Dallas	227	Hospitals, Community Centers, Title III Nutrition Centers
Kansas City	160	Hospitals
Denver	19	Elderly Persons' Housing Units, and Community Centers
San Francisco	N/A ^b	N/A
Seattle	20	Hospitals, Title III Nutrition Centers
TOTAL	1,491	

NOTE: Data based upon estimates available from HCFA Regional Offices, as of July 1979. Information as to the number of sites or volunteers per site in each region is unavailable.

^a Volunteers include hospital auxiliary volunteers and CETA workers, but exclude professionals trained by Regional Offices. The Atlanta Region has trained 450 professionals, and the Kansas City Region has trained 50, including Title III nutrition site coordinators and personnel from Area Agency on Aging offices. The Denver Regional Office trained 116 community health workers during 1978 to work on Indian reservations.

^b 192 volunteers were trained by the San Francisco office, but no estimates are available as to the number of active participants and their locations.

An example of a successful beneficiary program is the one operating in Palm Beach, Fla. According to the Palm Beach Social Security district office, there are more than 100,000 elderly persons enrolled in Medicare in Palm Beach County, with 250,000 claims filed annually. Each year 5,000 elderly persons become eligible for Medicare in the county.

Typically, in that area, beneficiaries have experienced long delays in receiving Medicare payment on their claims. One explanation given for the long delays is the failure of beneficiaries to fill out claim forms correctly and to provide complete information. Here, 65 volunteers help to alleviate these beneficiary problems.

The county program started in early 1978 with five sites, and now has expanded to 12, with two more sites planned for the near future. Seven of the sites are at retirement condominiums, the others are a shopping center, a public library, the city hall, and at two community centers. About half of the 65 volunteers are participants in the Retired Senior Volunteer Program (RSVP); the rest are individuals unaffiliated with the organization. Of the 94 volunteers originally trained, 61 are still active in the Palm Beach program. An additional four volunteers, not part of the original 94 volunteers, later joined the program. The volunteers assist beneficiaries with over 500 claims per month, during peak periods, and average 7,000 claims per year.

In other parts of the country, volunteers are on-site in hospitals. For example, 38 hospitals in New Hampshire and Vermont have a beneficiary aide program, with aides making rounds to visit elderly patients to answer their questions about both Part A and Part B of Medicare. The most frequent questions asked aides pertain to delayed Medicare payments, available benefits, and billing procedures.

Supplemental Beneficiary Services

In addition to the development of beneficiary aide programs, other beneficiary services are offered in HCFA regions. For instance, HCFA Regional Offices provide speakers for group forums at county fairs, community centers, churches, and nutritional sites. The Seattle Regional Office is planning a beneficiary conference in Portland. The conference will be directed towards persons already enrolled in Medicare, and will focus on common difficulties that beneficiaries have with Medicare and where to seek help.

In Dade County and Palm Beach County, Fla., a Senior Advisory Council acts as a representative of elderly persons' interests. The Council is comprised of leaders of senior organizations who meet with the Medicare carrier monthly to discuss general beneficiary problems occurring, such as claim delays. The representatives are then expected to report to their various organizations on the status of the problem.

Future Plans for Beneficiary Services

HCFA and Medicare carriers' awareness of the needs of Medicare beneficiaries has created an array of plans for future services. Almost 100% of the Medicare carriers now have some form of toll free telephone service. HCFA's goal is to expand this service to cover larger geographic areas, including entire States. In addition, a Maryland carrier has indicated an interest in holding a "town meeting" for Medicare beneficiaries.

Although still in the planning stages, HCFA may seek to increase input through a sample survey of beneficiaries to obtain feedback on the Medicare program. Also, several HCFA Regional Offices are planning to increase the number of volunteers trained, as more non-profit organizations are becoming aware of and interested in beneficiary aide programs.

The HCFA Office of Beneficiary Services now acts as the liaison between HCFA Regional Offices and various non-profit organizations in coordinating beneficiary aide programs and keeps track of existing programs. At present, there are no scientific studies evaluating the effectiveness of beneficiary aide programs, but several pilot evaluation projects to serve both Medicare and Medicaid beneficiaries are planned. If the pilot projects prove to be as successful as many of the operating programs, the Office of Beneficiary Services plans to coordinate projects around the country. A standardized training program and manual for volunteers will also be developed, since a national effort to coordinate beneficiary aide programs is necessary to assure volunteer morale and to insure that volunteers receive the best training. This national HCFA effort will guarantee beneficiaries the quality service they deserve.

For further information, contact Director, Office of Beneficiary Services, HCFA, 1-C-11 Oak Meadows, 6340 Security Boulevard, Baltimore, Maryland 21207. The Director can be reached by phone at 301-594-9650 (FTS 934-9650).

For more information in HCFA Regions about beneficiary aide programs contact:

Region I	Boston	Marilyn Yamartino	617-223-2268
Region II	New York	Blanche Duffy	212-264-0019
Region III	Philadelphia	Dorothy Watson	215-596-6857
Region IV	Atlanta	Marjorie McIntyre	404-242-2017
Region V	Chicago	Larry Feldt	312-353-9811
Region VI	Dallas	Mary Ace	214-729-6401
Region VII	Kansas City	Ona Owens	816-758-3682
Region VIII	Denver	John Isham	303-327-2641
Region IX	San Francisco	Thomas Burtscher	415-556-9151
Region X	Seattle	Boyd Wilson	206-399-4827

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NOTES:

1. Maria Gornick, "Ten Years of Medicare: Impact on the Covered Population," *Social Security Bulletin*, July 1976.
2. HEW, HCFA, Medicaid/Medicare Management Institute, *Title XVIII/Title XIX Comparison: Regulations, Structures, and Dimensions* (Washington, D.C.: 1977).
3. Gornick, op. cit.
4. HEW, HCFA, Office of Policy, Planning, and Research, *Current Medicare Survey Report Supplementary Medical Insurance: Utilization and Charges for the Aged*, 1974, Research and Statistics Note.
5. HEW, Office of Human Development Services, Administration on Aging, *Facts About Older Americans*, 1978.
6. Gornick, op. cit. Gornick defines net assignment rate as the number of assigned claims expressed as a percentage of claims received, omitting claims from hospital-based physicians and

group practice prepayment plans which are considered to be on assignment.

7. HEW, HCFA, *Quarterly Report on Part B Carrier Reasonable Charge and Denial Activity, October-December, 1978*. Assignment rate of claims is the number of assigned claims paid or applied to deductible divided by total number of claims paid or applied to deductible $\times 100$.
8. HEW, Inspector General, *Service Delivery Assessment Report-Medicare Clients Relationships with Fiscal Intermediaries*, March, 1979. Inspector General's study based upon 325 interviews of elderly persons at Title III nutrition sites in Illinois, Indiana, and California.
9. HEW, HCFA, Division of Contractor Performance Evaluation, *National Data on Part B Enrollment, Claims Received and Processed by Part B Carriers, and Review Requests Received: CY 1968-1978*.
10. *Ibid.*
11. A.R. MacIntosh, and J.A. Blanchard, *Report of Medicare Appeals Pilot Study* (Washington, DC.: American Association of Retired Persons/National Retired Teachers Association, February, 1979).
12. A.R. MacIntosh, *Medicare Claims Assistance Program: Evaluation of the Training of Counselors* (Washington, D.C.: American Association of Retired Persons/National Retired Teachers Association, July, 1979). All information about the Dallas Training Program obtained from this evaluation.



ADULT DAY CARE IN MASSACHUSETTS

by ANNE KLAPFISH

Introduction

Due to increasing nationwide emphasis on providing cost effective alternatives to institutionalization, the Medical Assistance Program of the Massachusetts Department of Public Welfare has expanded its adult day care program Statewide. This program provides structured health care and social services to a population that without such intervention runs a high risk of institutional placement. The program also enables some individuals who have been institutionalized to return to community living. The Massachusetts program encompasses health care delivery, emphasizing improved or stabilized health for the patient; social services to participants and their families in coordination with community health care/social service networks; and lessening the burden to family members, including counseling caretakers to cope with their family situation.

Specifically, the Massachusetts adult day care program offers professional supervision, observation and care in health, therapeutic, restorative, and nutritional services. Educational, recreational and social activities are also planned to maintain the patient's highest level of functioning, to delay or prevent institutionalization.

Background

Between February 1975 and January 1977, the Massachusetts Medical Assistance Program (MAP) awarded six contracts to nursing homes, hospitals and community providers to operate adult day care centers for a one year pilot study. The State was responding to a perceived need for a variety of service options with a continuum of care for elderly or disabled medical assistance recipients. Massachusetts based their program on criteria outlined in a 1972 amendment to the Social Security Act (P.L. 92-603, Sec. 222) that authorized HEW to initiate experimental day care programs for Medicaid and Medicare eligible clients. Basic Federal guidelines allowed for three possible

day care models: the therapeutic or restorative model, designed for the short term rehabilitative client; the maintenance model, designed for the chronically ill or disabled client needing health supervision and socialization to maintain his/her functional status; and the social model, designed for the frail elderly needing socialization and supervision but who have no specific health needs.

Merging those models, Massachusetts developed their own specific guidelines for the six pilot programs. Under these guidelines the adult day care providers had to offer:

- health restoration, monitoring and supervision;
- social service counseling for program participants and their families;
- therapeutic recreation and socialization;
- personal care;
- nutrition; and
- transportation.

Staffing guidelines for the pilot required that each program have an RN for at least two hours per day, an activities director for at least four hours per day, occupational, speech and physical therapy consultants, and an overall staff/participant ratio of one to six.

The program was designed to accommodate both private pay and Medicaid eligible clients, based on the client's eligibility for Level III nursing home placement. (Level III is Massachusetts' level of ICF care requiring 24 hour supervision, but not necessarily nursing supervision.)

A January 1977 evaluation of the first year of operation revealed that the pilot program had achieved its goal—a cost effective and needed service option for Massachusetts clients in jeopardy of nursing home placement. A high degree of client and family satisfaction was reported, since most patient needs could be met within one setting. This evaluation prompted the Medicaid program to expand the number of adult day care programs across the State. The Medical Assistance Program revised the pilot guidelines, increasing staff/nursing requirement to four hours per day, and requiring sites to be barrier free for the handi-

capped. Request for proposals were then disseminated to potential providers, and reviewed by an inter-agency task force. During FY 78, eleven new programs began operating.¹

Program Standards

In Massachusetts, providers for adult day health services include licensed hospitals, nursing homes, social agencies or other organizations wishing to offer their services. Any health facility must hold a valid license from the Massachusetts Department of Public Health and meet DPH determination of need requirements. Providers must also meet the following standards for adult day health services.

They must have and maintain a strong liaison with community service agencies, and staff members must assist participants and families in learning of and using community agencies for financial, social, recreational, educational, and medical services.

To be eligible for the adult day care program, individuals must be age 16 or over. (Providers may set their own limits on the age groups they wish to serve.) Any individual referred whose medical condition indicates a need for nursing supervision or services, or a possible need for therapeutic services may be admitted. Participants may also include:

—patients discharged from a hospital but needing rehabilitative and/or nursing services, as well as emotional support, to promote their return to independent living;

—individuals who because of medical or psychosocial conditions are at high risk of nursing home placement;

—patients discharged from a nursing home who are able to return to their community through participation in a day care program; or

—chronically disabled individuals who cannot be left alone without supervision.

MAP reimburses the adult day care provider for those sessions actually attended by a medical assistance client. Providers maintain financial records including monthly program expenses, and both direct costs and in-kind contributions and services. Records on participants being served, the number of individuals awaiting admission, and staff are kept as well.

Adult day health service facilities are open at least eight hours daily, five days per week, with partici-

pants required to spend at least six hours per day in the program, excluding transportation time.

Program staff arrange patient transportation using the most appropriate and economical modes. Free or low cost services (Senior Shuttles) or transportation in cars of family, friends, or neighbors are examples of this. If there is no local transportation service, the MAP reimburses the adult day health service program for participant traveling costs to and from the center, or for a center's own vehicle.²

Each program must include a minimum of two full time staff, increasing to one full time staff person for each six participants as needed. A registered nurse and an activities director must work daily with participants for a minimum of four hours, and staff from a variety of fields (e.g., nursing, social work, recreation) must provide other services. The provider designates a full time program director and assistant program director from the professional staff members. Qualifications for health care staff are those given in "Rules and Regulations for the Licensing of Long Term Care Facilities," issued by the Department of Public Health. Volunteer staff are actively solicited from groups, clubs, churches, and community organizations to assist in providing services. Program directors select volunteers for their sensitivity to the population served.

Planning and Providing Services

In the first step of planning adult day care services, the provider obtains pertinent information from the patient's physician, including medical history, current medications and treatments, special diets, previous discharge summary and, if applicable, a statement indicating any restrictions or participation in activities.

To determine whether a patient should be admitted, a multi-disciplinary team interviews each individual, and his/her family, when applicable, (e.g., when the individual requests that family be present). The RN, the program director and at least one other staff person obtain information on the individual's general health characteristics, psychosocial condition, nutritional habits, and home support system. This interview also serves to acquaint both individuals and families with the program activities. Individuals may be

¹ The name adult day care was formally changed to adult day health services in June 1977.

² Rates of payment to transportation providers cannot exceed rates established by the Massachusetts Rate Setting Commission for transportation providers under the Medical Assistance Program.

admitted for a three week trial period. After two visits during that time, the individual is considered for admission. The Adult Day Health Service provider then completes a detailed MAP assessment form and submits it to the MAP before the individual's fifth day of attendance. This assessment is designed to measure the patient's functional status, in such areas as mobility (can he/she go outside without human help or without equipment/device?), or eating/feeding (is help required?). The patient's psychosocial behavior is also evaluated. This would include the patient's ways of communicating with others, degrees of reality orientation, and such items.

Within two weeks, the MAP advises the provider in writing of approval or disapproval of the individual's continued participation in the program. Once approval is granted, the provider and the patient sign a written agreement covering basic services offered, per diem costs,³ and other commitments, e.g., patient agrees to participate at least two days per week. (In unusual cases, the MAP may provide a waiver for those individuals who would benefit from only one day attendance per week.)

Within five days, the RN develops a participant care plan. This includes a health treatment plan based on physician orders, a nursing assessment and therapists' recommendations for prescribed services; and a supportive service and activity plan designed to meet the participant's psychosocial needs.

Program staff review this plan at least monthly, and record any changes in the participant's treatment or condition. This plan in turn is augmented by monthly (or more frequent) notes made by the RN, activities director, social service personnel, and therapists involved. Quality of care monitoring is accomplished by a MAP nurse consultant, through periodic on-site reviews.

Providers offer ongoing care services for all patients. For example, nursing services may include supervising administration of medications (either self or staff administered) and treatments prescribed by the physician; coordinating the development of the care plan; monitoring each participant's health status; and followup restorative treatment recommended by a therapist.

As stated earlier, restorative services are provided to each participant, based on recommendation by therapists and/or physician orders. These include occupational, physical, and speech therapy. Therapist

consultants may train staff to give patient followup therapy, or may provide direct therapy to patients on a fee for service basis.

Social, recreational, and educational activities are designed as tools to maximize participant self-awareness and functioning. These activities focus on social interaction, motivation, and creative productive endeavors (exercises, gardening, crafts, trips, drama therapy). Staff give training and assistance in personal care services also, including dressing and grooming, accident prevention, and activities of daily living.

Daily nutrition services in day care centers include a hot meal and two snacks, prepared under direction of a nutritionist. Staff members provide nutrition counseling, consumer shopping advice and menu planning. Trained counselors or social workers offer assistance with personal, social, family and adjustment problems. The MAP recommends the provider offer at least one weekly group counseling session for participants and one monthly group meeting for families.

To cover emergency situations, the adult day care centers make arrangements with other nearby providers. They must have written agreements with a nearby hospital for inpatient and emergency care, and with an ambulance company for emergency transportation. In addition, an easily located file on each participant must list the physician's name and telephone number, treatments or medications for the patient's special disabilities, and the name and telephone number of a person to be notified in case of emergency. Both staff and participants must be trained in emergency procedures, including posted notices indicating evacuation procedures that meet local fire department regulations.

A participant may be discharged from the adult day health service program under the following circumstances: he/she demonstrates sufficient improvement for more independent living; he/she requires specialized institutional care or develops behavioral problems that may endanger others; or he/she wishes to discontinue participation. Followup is conducted for four months after discharge to independent living. Through this followup, both MAP and the provider evaluate the success of the discharge plan, and ensure that the participant is receiving necessary services. Discharge plans are, of course, prearranged with the participant and his/her family.

Outreach is a vital component of every program of this type, and is designed not only to reach those at high risk of institutionalization, but to inform the

³ Per diem rates are set by the Massachusetts Rate Setting Commission. These will be discussed later in the article.

community at large about the program. Typically, outreach is accomplished through brochures, letters to physicians, health facilities and social service agencies in the area, meetings with community service agencies to develop referral mechanisms, and local newspaper articles.

Program Results

Data collected from the 17 programs operating during Fiscal Year 78 in Massachusetts provides interesting insights into the 336 new clients admitted to adult day health programs during that time.

Health organization referrals significantly increased in FY 78, largely due to a greater number of referrals from hospital discharge planners. State staff find this a particularly encouraging result, because of an earlier demonstrated tendency of hospital discharge planners to refer patients to nursing homes. Many of these FY 78 referrals were to adult health service programs that were part of the original pilot. This suggests that program longevity not only results in higher referrals from hospitals, but also is effective in preventing institutionalization. The second largest block of health organization referrals came from Visiting Nurse Associations (VNA). The VNA has access to many clients that could benefit from adult day health care. Most VNA referrals were to free-standing community based programs, rather than nursing home based adult day care programs. There was also an increase in referrals by home care providers and other community agencies in FY 78. Overall, these increased referrals suggest that adult day health in Massachusetts is gaining broader acceptance in the community health/social service network as a viable option and an integral part of the continuum of care.

Of the 106 clients discharged in FY 78, 37% were discharged to institutional care, 15% to skilled nursing facilities, 17% to intermediate care facilities, 2% to chronic hospitals, and 3% to rest homes. A large percentage of those patients were discharged from nursing home based adult day health programs. This data may be explained by two factors: nursing home based programs seem more willing to accept a sicker clientele, and many of these programs accepted clients on emergency respite basis for families until nursing home placement could be arranged. There was no evidence that adult day care programs based in nursing homes were using these clients to fill empty beds.

On examining the data, one side effect was noted: transition from community to nursing home appears easier for those patients participating in adult day health services in an institutional setting. Obviously, this is related to familiarity with surroundings and accompanying diminishment in adjustment problems for some patients.

Of the patients discharged to the community (42%), a number gave reasons other than better health: 29% were either afraid to attend or did not feel comfortable in the center. The first fear appears related to traveling in winter weather; other patients were uncomfortable because family members pushed them into the program unwillingly. Two people had a language barrier, and two felt too young. More than 90% of those discharged because of fear or dislike remained in the adult day care program for less than one week. Some 8% of the discharged population became disruptive or abusive toward other clients. Transportation difficulties resulted in discharge of another 3% of the clients.

Of all those participating in the adult day care program, 6% had to withdraw because they could not afford it. This reinforced the Medicaid program and adult day health service staff view that almost nonexistent funding sources other than Medicaid for such services are a distinct drawback to locating community residents needing such care.

Some 14% of the clients discharged to the community had definitely improved after attending the adult day health program and were discharged to more independent living situations. (To smooth that particular transition, many of these participants returned to the program one or two days a week as volunteers to work with succeeding patients.) Adult day health service staff arranged appropriate referrals for those discharged to the community, analysis reveals: 40% to home health agencies for nursing or aide services; 24% to homemaker services; 10% to mental health services, 6% to hospital rehabilitation clinics, 3% to family service organizations and 5% to congregate housing.

To determine the degree of disability among day health participants, nursing staff surveyed patients' mobility, walking, bathing, stair climbing, dressing, feeding, toileting, and wheeling. In comparison with pilot year participants, there was significant increase in the number of individuals using wheelchairs, underscoring the importance of the barrier-free facilities for this type of effort.

Study of adult day care program patient diagnoses confirmed that there were indeed serious health dis-

orders indicating a need for nursing care and monitoring. Hypertension—a serious health problem that can lead to debilitating illness—was shown for 26% of participants, underscoring that monitoring and observation by the RN may prevent or delay institutionalization through adult day care services.

Demographic information showed predictably enough that 97% of the population was over 60; with 46% being 75 or older. Less than 3% were under 50, and the remainder between 50 and 60. In comparison with the pilot year, the major change in living arrangements for participants was the increased number of persons living alone. A great deal more effort is required for those clients. This ranges from coordinating better housing, homemaker and home health aide services, to grocery and clothes shopping and laundry, reinforcing the importance of an adult day health service program.

With expansion of the program, the number of persons actually served doubled in one year's time, (336 in FY 78) and daily capacity for service increased from 103 to 400 openings for participants per day. The potential number overall, given an average attendance of 2.7 days per week, has increased from 150 to approximately 600 openings. Actual enrollment, however, has not kept up with the potential number of openings for several reasons: the relative newness of many of the programs; or other agency reluctance to refer clients until the new program had proven itself.

Significantly, 69% of the clients were Medicaid eligible. While this majority representation may be partially due to the poverty/health causal relationship, the most likely explanation is that Medicaid is the major funding source for the program.

Program data demonstrates that overall transportation services cost relatively little: 15% of all trips taken were by taxi, and 7% of the trips were by chair car (most costly mode). Some 36% of all trips taken were by the facility's vehicle, 30% on community vehicles (bus, etc.), and 12% by family car (low cost or free to the program). Average transportation costs were estimated at \$4-5 round trip per person.

Based on total program costs, the average per diem rates for Massachusetts adult day care services are \$13.16 at 100% occupancy; \$14.62 at 90% occupancy; \$15.45 at 85% occupancy; and \$16.46 at 80% occupancy. Program data for FY 78 show that about 74% of all per diem costs incurred by the adult day health program go toward personnel expenses, with 26% allocated to program expenses and overhead costs other than staffing. Of these total operating

costs submitted by the provider to the MAP, an average 70% are considered in calculating the Medicaid per diem rate. The remaining 30%, in kind or donated to the provider, are based on the value of contributed services, supplies or space. The Massachusetts Rate Setting Commission is mandated by law to base rates on fair and reasonable costs.

Development Costs

The Medicaid program, like most health delivery systems in this country, operates on a fee for service basis. States receive Federal matching funds to purchase direct services for Medicaid clients. Thus, per diem funding of an adult day health program is available once the program is operating. Massachusetts, as any other State, had to obtain start-up funds from other sources. In Massachusetts, several adult day health programs were initially funded under Title III of the Older Americans Act (day care demonstrations), from community development block grants, or through private community resources.

Due to initial cash flow problems and the accretionary pace of enrollment in a new program, sufficient funds must be solicited to cover a minimum of two months operating costs for an adult day care program. In Massachusetts, most of the programs also allocated three months salary for the program director, so that he/she could be hired during the organization phase, before the program actually begins operation.

Based on our experience, 60 day direct operations costs typically ranged from \$16,000–\$17,500 for a program with a capacity for thirty participants per day, to \$7,000–\$13,500 for a program with a capacity for fifteen participants per day.

Approximately one half of the Massachusetts adult day care programs also experienced renovation costs. (Renovation needed ranged from making one bathroom accessible to the handicapped to total construction of a day health center.) One frugal approach used by some programs substantially lowered labor cost in renovation—tapping local trade schools and technical high schools for construction workers. The range of renovation costs reported here should be viewed as a guide rather than an absolute. Initial staffing, speedy enrollment, space and equipment costs, donations available, etc., are all unknown variables. (One program with a capacity of twenty per day developed successfully on a shoestring budget of \$6,000.)

Conclusion

Presently, Massachusetts leads other States in adult day care service delivery, with 40 programs approved for operation as of August 1979. Although we are reviewing proposals from all areas of the State, we are actively encouraging applications from providers in areas with a deficit of nursing home beds and a high percentage of patients in hospitals waiting placement at a lower level of care.

Referrals and admissions continue to grow; some 807 clients were participating as of August 30, 1979, and 25 of the programs now have waiting lists.

While the majority of adult day care participants are elderly, this service model can be just as relevant for a younger chronically ill and/or disabled population. Massachusetts is currently experiencing a growing number of referrals for clients in the 30-50 age group.

Finally, and most important, in Massachusetts, we firmly believe that State Medicaid agencies must take a holistic approach in funding the delivery of uniform quality care to day care participants. Thus, adult day care programs treat the total patient (his/her physical, social, and emotional needs) by offering a "total care package."

One example to illustrate this point: Mr. J, a stroke patient, entered a Massachusetts adult day health program paralyzed on the right side, and feeling useless and dependent. The day care program addressed his physical needs with therapeutic services, careful monitoring of vital signs and medications, and so on. By offering additional services, the adult day care program restored Mr. J's self esteem. By socializing with peers, he was able to adjust to his surroundings and regain a sense of self-worth. Weaving on a specially designed loom restored strength to his right hand and arm, and stimulated his creativity. His wife received counseling from the day care program social worker to accept her husband's disabilities and to work actively with him toward recovery. Health services alone would not have restored Mr. J to his present status; a combination of services did.

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THE MARYLAND MEDICARE WAIVER

by CARL SCHRAMM, PH.D., J.D. and JAMES LEWIS

(EDITOR'S NOTE: *The first article on the background of the Maryland Health Services Cost Review Commission appeared in the September issue of Perspectives. In this sequel, Dr. Schramm and Mr. Lewis describe how the HSCRC sets hospital rates for Medicare and Medicaid.*)

Background

Since its creation by the 1971 Maryland State Legislature, the Health Services Cost Review Commission (HSCRC) has come to be regarded as one of the most innovative State rate regulating agencies. Part I of this two part series on the HSCRC described the history, activities and the actual review mechanism used by the Commission.¹ This article examines a unique aspect of the Maryland HSCRC's prospective reimbursement system, namely, the way the HSCRC establishes hospital rates paid by government purchasers of care under Medicare and Medicaid.

On July 20, 1976, the Bureau of Health Insurance of the Social Security Administration approved a demonstration project under which Medicare would reimburse Maryland hospitals on the basis of rates approved by the HSCRC.² This demonstration project was to become effective as soon as the HSCRC completed its initial round of hospital reviews and established rate schedules for hospitals in the State. In accordance with the agreement, on July 1, 1977, at the completion of the initial rate setting process, both Medicare and the Maryland Medical Assistance Program (Medicaid) implemented a system of prospective reimbursement based on HSCRC-approved rates. By including the government payors, Maryland became the first State where all payors for hospital care—cash payors, private sector insurers and government payors—were paying identical prices based

on rates prospectively established by a single State-wide regulatory agency. Legislative authority for Medicare and Medicaid participation in this payment scheme is in Section 222(b) of Public Law 92-603 (the 1972 amendments to the Social Security Act). The authority is described in Section 1902 (a)(13)(D) of the Social Security Act and codified in 42 CFR 447.200 and 42 CFR 447.261.

The main provisions of the Medicare demonstration project or "waiver" are that: 1) the government will reimburse hospitals at HSCRC approved rates, subject to the caveat that Medicare and Medicaid will not pay more in total program costs in Maryland under HSCRC rates than they would have paid in the absence of the Commission; and 2) the HSCRC will perform six rather large scale studies of the project. These two provisions are discussed in detail below.

System of CAPS Imposed on Medicare Reimbursement

The basic HSCRC mechanism for determining rates for a particular Maryland hospital was not altered by the Medicare waiver; the rates merely were to apply to Medicare and Medicaid patients as well as all others. (For a description of the rate-setting mechanism, the reader is referred to Part I of this series of HSCRC articles.) As mentioned, one of the principal conditions of the waiver is that the aggregate Medicare reimbursement under the demonstration project not exceed the amount paid in Maryland under Medicare's previous cost-based reimbursement formula. Therefore, a method had to be devised for determining the amount which would have been paid by Medicare had it not chosen to participate in the HSCRC rate system.

¹ James Lewis and Carl Schramm, "Setting Hospital Rates in Maryland: An Analysis of Prospective Reimbursement," *Perspectives on Medicaid and Medicare Management* (September, 1979), pp. 41-47.

² Medicare was administered by BHI/SSA until the creation of the Health Care Financing Administration (HCFA) in March 1977. HCFA then became the administering agency for both the Medicare and Medicaid programs.

The method developed for this task is the "CAP" test. The CAP test actually involves two separate upward limits on payment, CAP I and CAP II. The lower of the CAPs eventually serves as the maximum amount by which Medicare and Medicaid costs in the State are allowed to increase each year.

The first test (CAP I) involves the extrapolation of the rate of increase in the cost per Medicare admission between a base year (one prior to HSCRC-based rates), and the experimental year (one with HSCRC-based Medicare rates in effect). The method uses the Medicare cost report for the fiscal year immediately preceding the period of HSCRC-based rates to establish the base year costs. Specifically, base year costs are the actual Medicare inpatient costs divided by the actual Medicare admissions.

The extrapolation of the base year cost figures forward to any Medicare experimental year involves an analysis of five factors:

- 1) Routine inflation of traditional factor costs such as wages, fringe benefits, supplies and contracted services, physician's fees and capital costs;
- 2) Abnormal increases in factor costs, for example, malpractice insurance premiums, required pension expenditures, and the costs of other newly mandated government programs;
- 3) Increases or decreases in the volumes of services provided in the experiment year as compared with services provided in the base year;
- 4) New programs such as the institution of a tumor registry or expansion of data processing for information purposes; and
- 5) New services which require the approval of the comprehensive health planning agency.

While each of the five categories presents problems, the principal difficulties surround the computation of the first factor, the routine inflation of traditional factors. In calculating routine inflation of traditional factors, the HSCRC uses the following method. For salaries, wages and fringe benefits, the inflation adjustment relies on the rate of change of the average hourly wage for hospital workers as measured by the Bureau of Labor Statistics. Using this information, an index for the rate of increase in salaries, wages and fringe benefits is calculated by the formula:

$$\frac{\text{average hourly earnings during the experiment period}}{\text{average hourly earnings during the base period}}$$

Adjustment for physician's fee inflation is made by using the rate of change of the physician services

portion of the medical care component of the consumer price index (CPI). Using the CPI as proxy, an index for the rate of increase in physicians' fees is calculated by the formula:

$$1 + \frac{\text{annual index for the experiment year}}{\text{annual average index for the base year}}$$

Inflation in contracted services is measured by using as a proxy the rate the average hourly wage changes for service industry workers, as monitored by the Bureau of Labor Statistics. Using this information, an index for the rate of increase in contracted services is calculated by the formula:

$$\frac{\text{sum of the monthly average hourly rates during experiment period}}{\text{number of months in experiment period}} - \frac{\text{sum of the monthly average hourly rates during base period}}{\text{number of months in base period}}$$

The category of supplies is adjusted by using a more complicated measure which involves weighted averages of specific components of the Wholesale Price Index (WPI) and the CPI, coupled with the actual price changes experienced by Maryland hospitals for certain categories of health care supplies.

Finally, capital costs are adjusted by using the experienced rate of inflation for such expenses, as set forth in the Medicare reports of Maryland hospitals.

For each of the above categories, the measures are weighted to reflect their proportionate influence on total costs in order to arrive at an overall index for normal increases. The calculations are then adjusted to reflect increases or decreases in the volume of services provided in the base year, relative to those of the experimental year. In order to adjust for changes in volume, a determination of fixed and variable costs for the major revenue centers is made. The HSCRC currently employs the following fixed to variable cost ratios in its calculation: routine care 40/60; admissions 40/60; clinic 20.9/79.1; labor and delivery 20.11/79.89; and ancillary 60/40. The increase or decrease in service volume is determined by using quarterly volume reports submitted to HSCRC. Armed with the fixed/variable cost ratios and data on the experienced change in volume, the HSCRC calculates the percent change under the CAP I test. An example is instructive. If in the base period a hospital provides 10,000 relative value units of laboratory service, and in the experiment year it provided 15,000 units, the adjustment from base to experimental year for purposes of the CAP I test would be twenty percent. This

is calculated as follows: $[(15,000-10,000) - (10,000)] \times .4$ (variable cost factor for ancillary services).

Abnormal increases in factor costs, category 2 of the CAP I test, are treated as pass-through items, and are obtained from hospital records. Also, new services and those requiring approval of the planning agency are included in the cost adjustment by the amount reflected in the hospital's budget. Experienced inflation in the component areas is adjusted for changes in volume by calculating the final figure of CAP I, which is expressed in the form of an annual percent change in cost per admission.

The second component test, or CAP II, uses a measure of Medicare cost inflation per admission on the national level. CAP II is computed as the total national Medicare inpatient expenditure in the base year (immediately preceding the experimental year) divided by the total Medicare admissions in the experimental year. The change in the average cost per admission between the two years, i.e., the annual percentage change, is CAP II. Statistics on total admissions are obtained by adding the monthly admissions for all inpatient services from data provided by HCFA. Dollar expenditures are obtained from the monthly expenditures for Health Insurance Benefits.

After computing both CAP tests, comparisons are made to determine which of the two will be the effective index for adjusting Medicare and Medicaid budgets in Maryland. Basically, the lower of the two is the effective CAP. If, however, CAP I is more than 4% below CAP II, the effective CAP is CAP II less 4%. The following examples show various outcomes under the system.

- Example 1) CAP I = 7%
CAP II = 9%
Effective CAP = CAP I = 7%
- Example 2) CAP I = 9%
CAP II = 7%
Effective CAP = CAP II = 7%
- Example 3) CAP I = 6%
CAP II = 12%
Effective CAP = CAP II less 4% = 8%

For 1978, CAP I was calculated as 9.14 percent, reflecting a 1978 cost per admission of \$2556, compared to 1977 costs of \$2342. CAP II was calculated at 11.52 percent. Thus, the effective CAP was the lower, or 9.14 percent. Using the method employed in calculating CAP I, the extrapolated 1978 Medicare expenses for Maryland were \$300,040,537. Actual Medicare payments made under the HSCRC's rates

were \$284,845,910. The savings experienced as a result of paying HSCRC-determined hospital rates were \$15,194,627. This reflects a modest annual rate of inflation of five percent, well below the national average.

As discussed, the purpose of the CAP tests is to be certain that Medicare is not paying more under the HSCRC experiment than it would have elsewhere. Therefore, in any case where a Medicare overpayment might result as determined by comparing actual expenditures and the effective CAP, such overpayment is to be recouped from all hospitals on a proportionate basis. The basis is related to an individual hospital's share of the total Medicare reimbursement for the State, i.e., each hospital is responsible for a percentage of the overpayment, reflecting its share of total State Medicare hospital reimbursement. Not surprisingly, the HSCRC has received criticism from individual hospitals, as well as the Maryland Hospital Association, who contend that the system is inequitable, since the Medicare and Medicaid programs benefit from savings but hospitals continue to be at risk for program costs should they exceed the effective CAP. Hospitals do not receive any repayment from Medicare or Medicaid when their actual expenditures are less than the effective CAP. However, any required hospital repayments are considered as an allowable cost element in subsequent HSCRC-approved rates.

Six Studies to be Performed Under Contract

In addition to the actual reimbursement experiment, the Maryland Medicare waiver requires the HSCRC to complete six related studies. Each of the studies and their findings are discussed here.

Study 1. Cost of treating patients with particular diagnoses: This study was designed to provide the most accurate measure to date of actual costs on hospital-specific basis of treating patients with particular diagnoses. If such information on the cost of particular cases were available, it would then be possible to develop a system of hospital reimbursement based on specific diagnoses.

In order to complete this study, the HSCRC is using data collected as a part of its regular hospital rate submissions as well as a required quarterly abstract of medical record data. The HSCRC data collection is supplemented by the hospitals' submissions to the

PSRO, which includes information demographics, medical care, physician utilization, and source of payment. The study is limited to the standard costs of the fifty most common diagnoses, and, in addition, computes the average charge for 83 diagnostic groups on a hospital-specific basis for Medicare, Medicaid, Blue Cross and other payor categories.

Study 2. Feasibility of utilizing "case-related charges": Beginning in 1978, the HSCRC implemented a system of case-based reimbursement, known as the Guaranteed Inpatient Revenue (GIR) system in virtually all metropolitan hospitals of over 400 beds. In 1977, the GIR was used in three Baltimore hospitals on an experimental basis. The rationale behind the implementation of a diagnosis-based payment system is to relate a particular hospital's reimbursement for patient services directly to the burden of illness of the patients served. The HSCRC is performing its own analysis of diagnosis-based reimbursement, based on a concept known as "information theory."

Study 3. The economic implications of existing Maryland laws pertaining to the provision of health care services: This study requires the Assistant Attorney General, who is counsel to the Commission, to review existing laws and regulations including licensure, comprehensive health planning, Medicare and Medicaid, as well as the regulations of the Board of Medical Examiners and appropriate Civil Service regulations. The methodology for evaluating the economic implications of the laws varies depending on the particular law under study.

Study 4. A Statewide policy regarding charity care: The basic goal of the HSCRC regarding charity care is to distinguish genuine charity care from bad debts. Once this is accomplished, charity care can be treated as a pass-through cost, allowing the hospital neither to gain nor lose by providing either more or less charity care. As a result, the HSCRC will be able to approve hospital rates which reflect what it considers to be a reasonable allowance for bad debts. Since this allowance as a percent of the hospital's total budget is not normally altered, the hospital is provided with an incentive to improve its billing, credit and collection practices. The charity care policy itself is the result of the activities of a committee appointed by the HSCRC which considered the issue of inpatient charity care late in 1977. As an output of the committee's report, an inpatient charity care policy has been implemented experimentally at a small sample of general acute care hospitals.

The issue of outpatient charity care is much more complex than that of inpatient, due primarily to the large number of patient visits and procedures involved, and the great variance in insurance coverage. Guidelines have been developed, following discussions with several hospitals and the HSCRC's Hospital Industry Advisory Board. The outpatient policy was implemented experimentally at a sample of hospitals in Fiscal Year 1979.

Study 5. Probability distribution of admissions to the daily patient care centers: This study utilizes information generated by the minimum basic discharge data set required by the HSCRC. The findings of this study report on the probability distribution of emergency and non-emergency admissions. Most non-emergency admissions were found to occur on Monday, Tuesday and Wednesday, with very few patients admitted on Saturday. Such information, although not surprising, should prove useful to comprehensive health planners and hospital managers in providing appropriate and more efficiently utilized services.

Study 6. Determination of fixed and variable costs for service centers: This study will collect data to measure the variability of direct supply expenses in radiology and laboratory. The provisions of the HSCRC's rate review system itself specify the amount of certain fixed costs, such as utilities and management supplies. The study will improve the HSCRC's approach to labor, contracted services and supply costs. For example, in examining the fixed/variable ratio in labor expenses, industrial engineering techniques are being used which greatly increase the accuracy of the ratios.

Summary and Conclusions

The Medicare waiver in Maryland went into effect on July 1, 1977, marking the first time all payors within a State paid hospitals at a single level approved by one Statewide agency. The experiment requires the Maryland Health Services Cost Review Commission (HSCRC) to perform two CAP tests to ensure that the waiver does not result in Medicare paying more for care than it would have been required to pay in the absence of HSCRC approved rates.

As a result of the contract, the HSCRC became directly involved in the allocation of over \$400,000,000 in Federal funds which are channeled into Maryland hospitals each year. Significantly, the

initiation of the waiver allowed the HSCRC to begin Fiscal Year 1978 with a hospital rate roll-back of 3%, certainly a unique event. In addition, the rate of increase in Maryland Medicare costs has been held below the maximum allowed by the CAP tests, indicating a substantial savings for the government.

The findings, although as yet incomplete, provided by the six studies mandated by the waiver, have provided useful information to the health field, nationally, as well as within Maryland. Especially useful are the results of the studies to determine a diagnosis-specific reimbursement system, and to determine the fixed and variable costs for various levels of occupancy.

Certain problems have arisen as a result of the waiver, however. The HSCRC has found it very difficult to perform the necessary audit functions of cost and statistical data. Although this difficulty existed to some degree prior to the experiment, the situation was exacerbated by new Federal auditing require-

ments. In addition, the hospitals questioned why they should be penalized when Medicare and Medicaid budgets provide insufficient revenue, and yet not be rewarded when they do. This remains an unresolved issue.

Overall, the Medicare waiver in Maryland appears to be a useful and constructive experiment for all parties. The experiences of the current fiscal year will serve to answer additional questions, and HCFA will no doubt closely monitor the waiver's impact with an eye to implementing the Maryland model elsewhere.

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RADAR

Research and Demonstration Activity Report

Effect of Per-Case Reimbursement on Hospital Lengths of Stay

While hospitals have been the focus of much cost containment research and effort, few studies have been made of the physician's role as a determinant of hospital utilization patterns. In a National Center for Hospital Services Research research summary series, Gene A. Markel, M.A., of Pennsylvania Blue Shield (PBS), prepared a report describing one such study conducted by PBS. Based upon the hypothesis that incentives for earlier hospital discharges might result from a fixed per-case rate of reimbursement (PCR), rather than the usual fee for service approach, PBS conducted a unique experiment in phases between 1972 and 1976. Some modest favorable changes in average length-of-stay (LOS), associated with potential cost savings, were realized. While the findings can only be viewed as tentative, the use of a PCR method appears to have potential for achieving cost reductions. However, before this potential can be realized, several problems must be resolved.

The study was designed with two concepts in mind. First, what effects would per-case reimbursement have upon inpatient hospital utilization? This was determined by obtaining quantitative measures of any changes in length-of-stay (LOS) that could be attributed to this method of reimbursement. Second, what would be the cost implications of any observed variations in LOS? Cost implications were studied by comparing actual Blue Cross and Blue Shield payments for cases handled under this experimental reimbursement method with the payments that *would have been made* under regular payment procedures.

This study began in 1972 on a very limited scale, utilizing five hospital staff physicians in a single

Pennsylvania hospital and 15 frequently occurring diagnoses. A schedule of per-case reimbursement allowances was developed for each one of the diagnoses; the participating physicians accepted this as payment in full for cases handled. Payment schedules were developed using PBS claims data for each diagnosis: average LOS, typical patterns of physician services, and actual claims payments. Experimental and comparison groups were established. Details of the methodology can be found in the study. In essence, data for the experimental group were obtained from PCR claims forms submitted to Blue Shield by participating physicians. Data for the comparison group were taken from participating hospitals' Hospital Utilization Program (HUP) and Professional Activity Study (PAS) records for non-PCR program patients who received inpatient hospital services during the study period. Experimental and comparison groups were used throughout the time of the study.

Because some encouraging results were obtained indicating substantial reductions in LOS for several diagnoses, the experiment was expanded. During the major period of experiment, 45 hospital diagnoses were studied, and 61 physicians in nine hospitals participated. The participating hospitals were non-proprietary, non-teaching hospitals of small-to-medium size, averaging a little over 200 beds.

Length-of-Stay Changes: One part of the study compared changes in average LOS for each diagnosis in each hospital for both the experimental and comparison groups. No clear conclusions were reached under this method, as positive and negative findings were about equally divided. However, the findings appeared clearer when the LOS changes for each diagnosis were aggregated. The researchers indicated that this aggregate data reflected decreases in the av-

average LOS for the experimental group (PCR cases) in four hospitals while the average LOS for the control (non-PCR cases) decreased in two other hospitals. However, the researchers felt the results from one of these two hospitals should be discounted because that hospital's data represented only ten cases, all in the same diagnosis. A seventh hospital exhibited only marginal differences between the experimental and control group results. Overall, when aggregate results from all hospitals were combined, the researchers found a net three percent reduction in average LOS for the experimental group.

PCR effectiveness in reducing LOS varied greatly between diagnostic categories. The study also indicated that PCR is effective in reducing LOS in hospitals with low prior occupancy rates, since these hospitals might ordinarily try to maintain higher occupancy by allowing some slack in their LOS. Another interesting sidelight: the researchers found only one diagnosis, acute ischemic heart disease, for which the average LOS consistently increased or decreased in all participating hospitals for the experimental group (that one diagnosis appeared to reflect a consistent average LOS decrease in all the hospitals for the experimental group).

Cost Analysis: The bottom line for the cost analysis portion of this study appeared positive. Comparing actual and expected payments showed Blue Cross paying \$7,409 less, and Blue Shield paying \$808 more than otherwise might have been expected without PCR. Thus, there was a \$9 gain by Blue Cross for every dollar lost by Blue Shield, for an average gain per experimental case of \$8.

The validity of these figures may be questioned since there were marked differences in PCR performance and effectiveness between hospitals. For example, three hospitals paid out around five and six percent less per case than would have been expected under normal reimbursement procedures, with average savings per case ranging almost up to \$62. These decreased payments were offset by substantially higher payments at other hospitals. One hospital alone showed combined Blue Cross/Blue Shield payment increases of more than \$12 per case.

Changes in Admission Rates: Although the researchers anticipated an increase in admissions to compensate for a decrease in average LOS, this was not reflected in the study findings. Admission rates declined 5.3 percent for the experimental group and 4.2 percent for the control group even though the experimental group showed an aggregate LOS reduc-

tion of 2.6 percent and the control group aggregate LOS did not change. In addition, both groups' total inpatient hospital utilization declined. The experimental group used 12.9 percent fewer patient days and the control group 3.7 percent fewer days. These figures, obviously, reflect only a portion of each participating hospital's total experience.

Quality of Care: The quality of patient care under the PCR program was monitored through two sources. The first was a post-discharge questionnaire mailed to the experimental group. The questionnaire attempted to determine if reduced LOS led to premature discharge detrimental to patient well-being, sought patient perceptions of the quality of care they received, and asked if they received any bills above the PCR allowance rates. The responses received were favorable. Of the approximately two-thirds of the patients that responded, 99 percent reported receiving satisfactory care and 96 percent believed their lengths of stay were neither too short nor too long. In the few cases where dissatisfaction was expressed, follow-up revealed that dissatisfaction did not stem from factors solely related to the PCR program.

The other quality of care measurement involved hospital readmission rates. A high incidence of re-admissions for the same or related diagnoses could be considered an indication of inadequate treatment, including possible premature discharge. Blue Shield files of experimental patients readmitted to a hospital for the same or related diagnoses within six months of discharge under PCR were reviewed. The researchers did not find any excessive rate of hospital readmissions for experimental program patients. In fact, this study revealed an 11.8 percent readmission rate for experimental program patients, while PBS hospital inpatients not handled under PCR showed a 16.0 percent readmission rate.

Unresolved Issues: There are several problems to be considered under this type of program, the researchers point out. First, it appears unlikely that the PCR method could be an all inclusive system. Several factors lead to this conclusion: a certain number of diagnoses are not well defined; even if well defined, other diagnoses have a great range of accepted treatments; episodes of illness often involve multiple diagnoses; and sometimes no definitive diagnosis can be made for an illness. Therefore, illnesses not manageable under PCR would have to be handled under some other method, possibly fee-for-service. The author speaks of an in-house study which indicates that under ideal conditions a PCR system might handle

about 60 percent of all inpatient medical claims, but under less than ideal conditions might only be able to handle about 15 percent.

PCR then, may have to be a dual system, part PCR, part fee-for-service. This would tend to negate some of the advantages of PCR. Increased confusion in claims reporting procedures and greater complexity and costs of claims processing would result, if PCR were implemented adjunct to an existing payment system.

Another objection to PCR stems from the fact it must necessarily operate as a full payment program. Participating physicians must accept PCR as payments in full. Therefore, PCR program premium rates would probably be higher, possibly much higher, than corresponding rates for current Blue Shield programs. Also, if PCR rates are not competitive in the open market, the tax burden would increase for government-funded programs. In addition, it is unclear how PCR would work with non-participating doctors not obligated to accept Blue Shield payments as payments in full.

Yet another question exists as to whether physicians would accept PCR. In a random survey of Pennsylvania doctors, 43 percent objected, 34 percent reacted favorably, and 23 percent had no opinion. The two main physician objections were the use of discharge diagnosis as the basis for reimbursement and the fear "that PCR would lead to standardization of care and loss of patient individuality." Contrasting this was the more favorable reaction of physicians who participated in the PCR experiment. Eighty-nine percent were satisfied with this reimbursement method and 94 percent said they would accept it as a permanent payment method.

Finally, there is the problem of how to translate any potential savings from reduced average LOS into actual savings. Reduced LOS will lead to higher unit costs, unless hospitals increase productivity and/or eliminate unneeded beds and facilities.

Conclusions: The per-case reimbursement method could be effective for promoting shorter hospital lengths of stay, with physicians' incentive being guaranteed payment, and receiving the same payment for less work. The effectiveness of this method of physician reimbursement varied significantly between study hospitals. Although in this study Blue Shield payments to physicians were higher than Blue Shield's normal reimbursement rates, this increase was offset by reduced Blue Cross payments to hospitals due to reduced LOS. This is a favorable trade off, the study concludes, because inpatient hospital day costs are

higher than physician hospital visit costs. One may question, however, if the PCR shortened lengths-of-stay resulted in more than the usual number of follow-up outpatient physician visits (at home or in office) for experimental program discharged patients. This study did not delve into this point.

The PCR experiment provides "reasonably conclusive evidence that the case method of reimbursement can be effective in promoting shorter lengths-of-stay for inpatient medical care," but a number of issues must be resolved before PCR is sufficiently understood to permit effective implementation.

Auditing Nursing Home Chains

Medicare and Medicaid nursing home expenditures totalled nearly \$7.8 billion in fiscal year 1977. Most of that was Medicaid funds—\$6.4 billion, of which \$3.6 billion was the Federal share. Medicare expenditures for skilled nursing facilities were \$380 million.

The General Accounting Office (GAO) reviewed auditing procedures in both programs. In its report of January 9, 1979, GAO concluded that HEW and the States need to improve audit coordination and exchange audit results in order to expand audit coverage and eliminate overlapping audits of some headquarters offices.

Nursing home chains were the focus of the review because chains own or control a steadily increasing percentage of nursing homes in the country. Current estimates are that 25 to 30 percent of the homes, and 35 percent of the beds, are owned or controlled by chains. (Nursing home chains were defined as a group of two or more nursing homes commonly owned or controlled.)

GAO made the review to determine if Medicaid reimbursement for nursing home chain headquarters' costs was related to patient care; and if the States effectively audit nursing home chain operations.

The reviewers concluded that ineffective auditing of Medicaid payments to nursing home chains resulted in homes being overpaid and that unallowable costs relating to homes' transactions with chain headquarters were claimed and allowed for audit.

GAO recommended that HEW, through HCFA: provide for the exchange of audit results at nursing home chain headquarters among all affected Medicare intermediaries and State Medicaid agencies; and establish procedures to designate a single Medicare intermediary or State Medicaid agency as having audit

responsibility for each nursing home chain headquarters.

HEW, four States, and the chains reviewed and commented on, the report in draft. HEW agreed with GAO's conclusions. Some of the recommendations are already being carried out. As of December 1978, HEW had common audit agreements with 37 States.

Three of the four States commenting on the draft report (Florida, Iowa, and Nebraska) agreed with GAO's conclusions and recommendations. The fourth State, Kansas, said it was making progress in field auditing chain headquarters. In addition, Nebraska recommended that a Federal agency become involved in chain audits because the States do not have the ability to do this on their own.

Nursing home chains can be organized in a number of different ways. A chain could be a corporation established for the purpose of owning and/or operating nursing homes. A corporation might control the homes directly or through subsidiary corporations wholly owned by the parent corporation. Or a chain could be created by a person or group of persons who establish separate corporations to own or operate nursing homes. In this case, the link in the chain is the common ownership of the stock in the separate corporations.

The States GAO visited used all, or substantial portions, of the Medicare principles in reimbursing nursing homes for care provided to Medicaid patients. One of the Medicare principles found in the provider reimbursement manual, is that of the "related organization." In general, it requires that the reimbursable cost of goods or services provided to a nursing home by a related organization be the lower of: actual cost to the related organization; or price of comparable goods or services available elsewhere. Medicare guidelines provide that reimbursement to a nursing home affiliated with a chain should be computed using the same principles as if it were not so affiliated.

During the review, GAO visited HEW regional offices in Atlanta and Kansas City and State Medicaid agencies in Florida, Georgia, Iowa, Kansas, Nebraska, Oklahoma, South Carolina, South Dakota, and Tennessee. They also examined financial information on six for-profit and two non-profit chains, which owned or controlled a total of 302 nursing homes in 28 States. In order to review a cross-section of nursing chains, they included large, small, for-profit, and non-profit chains. They also reviewed chains only in the nursing home business as well as chains that were more diversified.

Chains often provide administrative services to their affiliated homes, lend money to them, and engage in property transactions to them. GAO found that States were improperly reimbursing: fees for headquarters administrative services which were higher than the cost of the services; interest on inter-company loan transactions; and charges associated with property transactions with related organizations or persons.

GAO examiners believe that there are three major causes for State auditors allowing unallowable costs:

1. State auditors failed to field audit the chain headquarters office as part of the audit of an affiliated nursing home cost report, particularly when the headquarters was out of State;

2. Even when field audits of chain headquarters were made by State Medicaid agencies or a Medicare intermediary, the audits were not coordinated, nor were audit results exchanged; and

3. Because of the complexity of some chain transactions and relationships, it is sometimes difficult to determine whether chain affiliations exist or less-than-arms-length transactions have occurred.

Of the eight nursing home chains that GAO audited, five overcharged the Medicaid program. The overcharges involved costs in one or more of the following categories: management fees (paid to headquarters by nursing homes) which exceeded headquarters' allowable costs; interest on loans between the headquarters and the nursing homes; and, property transactions between the chain and either the nursing homes or such related parties, as chain officials and their relatives.

The report discusses in detail six of the eight chains reviewed, incorporating the chains' comments. The chains reviewed have nursing homes in sixteen States. Ten of the sixteen States had field audited the headquarters. The headquarters of four chains had not been field audited by any of the review States.

Medicare already has in place comprehensive guidelines and audit procedures applicable to nursing home chains. HEW plans to build on the existing Medicare capability by establishing complementary Medicaid procedures within an overall audit structure.

Single copies of the GAO report ("Problems in Auditing Medicaid Nursing Home Chains," #HRD-78-158, January 9, 1979) are available free of charge from the U.S. General Accounting Office, Distribution Section, Room 1518, 441 G Street, NW, Washington, DC 20548.

Medicaid Participation and Medical Care

Medicaid participation and health care utilization and expenditures by the Medicaid population remain one of the least understood areas of health services research. Researchers have experienced difficulties in trying to collect data on the use of medical services, access to care, and movements onto and off Medicaid rolls. The National Medical Care Expenditure Survey gathered such data. Five series of interviews of 13,500 randomly selected households were conducted over a period of one year (1977), supplemented by a survey of physicians and hospitals providing care to household respondents, and a survey of the employers and insurance companies responsible for the respondents' insurance coverage.

Gail Wilensky, Judith Kasper, and Deborah Freund of the National Center for Health Services Research, HEW, have completed an analysis of preliminary data from the survey—two series of interviews with Medicaid recipients—and are now analyzing the rest of the data. Dr. Wilensky presented this paper at a meeting of the American Public Health Association, October 1978.

During the first interview series, there was a detailed enumeration of all public and private insurance held by the family. During the second, interviewers asked about any changes in insurance coverage. In addition, the interviewer asked if anyone in the family had Medicaid coverage at the time of either interview. The noninstitutionalized Medicaid population of nearly 17 million, or 8 percent of the total population, was estimated by including both persons directly reporting Medicaid participation and persons who reported Medicaid as a source of payment for care. The privately insured are used as a comparison group for the Medicaid population.

Not unexpectedly, the Medicaid population was shown to be younger, less well educated, and more likely to be both female and nonwhite than the privately insured population. The Medicaid population is more likely to report a poorer health status, is less likely to go to a private doctor's office, and more likely to go to a hospital outpatient department or emergency room. Although the Medicaid population has a slightly shorter waiting time for an appointment, they face a consistently longer wait at the site of care. The most striking of these preliminary data is the movement on and off Medicaid. Only slightly more than half were on Medicaid during both interviews. (January–March 1977 and April–June 1977).

The final analysis will be a study of changes in Medicaid participation through an entire year. For further information, contact: National Medical Care Expenditures Survey, Attn: Mr. James L. Brent, PHS, OASH, Rm. 1-57, Center Bldg., 3700 East-West Highway, Hyattsville, MD 20782.

Alternative HMO Models

This paper describes the major characteristics of alternative health maintenance organizations (HMOs) to aid regulators, planners, and developers of HMOs in decision making. HMO membership is growing. As of June 1, 1978, 40 percent of all HMOs had Federal approval. The 66 Federally approved HMOs alone had 4,380,929 members. Most HMOs (52) had less than 25,000 members. Yet, most members belonged to one HMO—the Kaiser-Permanente Medical Care Program.

The author, Robert A. Zelten, defines an HMO as “a formally organized system of health care delivery that combines the delivery and financing functions and provides comprehensive services to an enrolled membership for a fixed, prepaid fee.” The differences between various HMOs are often greater than the differences between some HMOs and traditional insurance programs. The author concludes that generalizations about HMOs are highly questionable and that any regulatory framework for HMOs should be very flexible.

The HMO definition used does not limit eligibility to group practice programs, nor does it conform to any existing legislative definition of HMOs. The definition includes those characteristics the author believes essential to meet the objectives intended for HMOs.

Most of the paper is devoted to a description and discussion of eight alternative HMO organizational models. This review includes two of the models. The variation occurs in the relationships between the plan (the entity that holds the contract with the members), its physicians, and its hospital(s). For example, as of June 1, 1978, Model II plans had the most members (75 percent of all HMO members) of any of the eight types. Model III was the most common—29 of 66 HMOs.

In Model II, the HMO owns or controls its own hospitals; physicians are members of a separate legal entity; physicians practice in a group; and the physicians' organization contracts with the HMO. An example is the Kaiser-Permanente Medical Care Pro-

gram (except its plan in Colorado, where the Kaiser-Permanente plan does not own its own hospital).

In Model III, the HMO contracts with community-hospitals; physicians are employees of the HMO (usually salaried); and physicians practice in groups. Group Health Association (GHA), Washington, D.C., is an example.

The major differences between Models II and III are: in Model III, the HMO does not own its own hospital and the physicians are salaried employees of the HMO, not a separate legal entity.

The impetus for HMOs is the systematic organization of the traditionally fragmented delivery of medical care. HMOs must guarantee access to care in a timely fashion for all of its members. Because an HMO is designed as a system, it is supposed to make better use of health resources. The addition of personnel and equipment follows a plan which focuses on the health needs of a defined population.

Unlike the traditional health delivery system, the HMOs health care system must be formally organized with the authority and responsibility for each of its various components clearly specified. Most HMOs are independent and separately incorporated. The feature which most clearly differentiates HMOs from other health delivery and financing systems is the combination of delivery and financing within one organized system. This approach places providers of health care at financial risk for the services they provide. If the funding is inadequate to finance all health services required by plan members, the providers must render services at reduced levels of payment. An HMO assumes responsibility for a defined membership, who, through the payment of a fixed fee, are entitled to care under the plan. Also, the plan must provide or arrange for the provision of a comprehensive range of health care services in order to encourage early detection and treatment of illness and to allow such care to be provided in the most efficient manner.

The author discusses several generalizations about HMOs in the context of the eight models. One example is the general belief that 30,000 members are required before a plan reaches financial break-even. Some HMOs lose money with over 30,000 members, while others make a profit with fewer than 10,000 members.

The author also discusses the HMO Act, Public Law 93-222, and notes that less than one-half of the currently operating HMOs have been qualified under the provisions of the legislation. Moreover, States are enacting legislation that provides HMOs with some

of the advantages of the Federal legislation (requiring certain employers to offer the opportunity of HMO membership to their employees), without some of the restrictive provisions of P.L. 93-222. The paper also includes a general discussion of the financial implications of regulatory approaches that have been applied to HMOs.

An appendix lists the Federally qualified HMOs as of June 1, 1978, with 1) model type; 2) qualification status (staff, group, or individual practice association); and 3) membership.

This is the third in an issue paper series of the National Health Care Management Center, University of Pennsylvania.

Influencing the Distribution of Physicians

The Southern Regional Education Board prepared this report after examining factors influencing physician distribution in the United States, along with strategies used by Federal, State and local government and organizations to affect better distribution.

The article reports that most medical manpower shortages have been corrected because of a concerted effort by Federal and State government to boost medical school development and enrollment. There are almost twice as many physicians graduating each year, compared to ten or twelve years ago; however, there is still a great disparity in geographic and specialty distributions, particularly in urban vs. rural areas. Rural areas simply do not attract a sufficient number of physicians, since these locales are frequently economically depressed, geographically remote, sparsely populated, and may not offer the social, cultural, economic, and educational opportunities of more urban areas. Physicians are more apt to locate in economically growing areas, where they expect to have all of these advantages, as well as proximity to sophisticated equipment and hospitals. Two groups of physicians are somewhat likely to locate in rural areas: physicians from rural backgrounds, and primary care physicians. Even so, the overall numbers and specialties are still maldistributed.

Strategies for Better Distribution: The report suggests strategies that can be used by Federal and State governments and local communities to bring about better distribution of physicians. State governments have the greatest influence, the author notes, because of their ability to control State licensure laws, fund scholarships and loans; fund residency training pro-

grams in family practice, fund Area Health Education Centers, and influence reimbursement schedules. Strategies of Federal, State and local governments are far more effective when they are coordinated, he adds.

Strategies for influencing physician distribution fall into two categories: those designed to influence the physician in training and those designed to influence the practicing physician.

Influencing the Physician in Training: The report suggests that the availability of high quality residency programs in a State is the predominant factor in attracting more physicians in training. Where physicians take residency greatly influences their selection of practice locations. Another strong factor influencing physicians in training is the Area Health Education Center (AHEC) which links health service organizations and educational institutions. Centers ease the problem of professional isolation, since they not only provide medical training to students, but offer continuing contact with an academic health center once the physician is in practice. AHEC has been a strong factor in affecting physician distribution in non-urban areas.

Federal loan forgiveness and scholarship programs have had limited success, since only about one in seven recipients actually served in shortage areas. The National Health Service Corps (NHSC) and State loan forgiveness programs have been more successful. The report suggests that loan forgiveness programs can be even more successful if they loaned more money combined with preferential admission programs for rural students. Rural students are more likely to remain in rural areas, regardless of the loan. Receiving forgiveness loans has a stronger effect on primary care physicians than on specialists.

Other strategies for influencing physicians in training are, first, preferential admissions to medical schools since studies show that students who are born, attend medical school, intern, and take residency in the same State are most likely to practice in that State. Second, some modification in medical school education might influence a decision to locate in a rural area, and, third, medical preceptorships where medical students are assigned to selected community practitioners during training, expose students to rural medical practice.

Influencing the Practicing Physician: Even after physicians have set up practice, the report suggests, certain factors will influence whether they relocate to or remain in a rural setting. One such factor is policies affecting income, particularly fee schedules that are typically less for rural than for urban physicians. Statewide fee schedules eliminating disparities might encourage more physicians to locate and remain in rural areas.

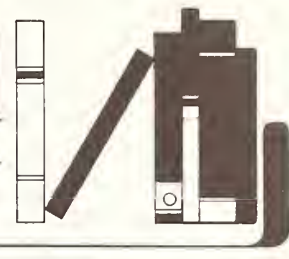
Another positive influence is the National Health Service Corps (NHSC), which forgives student loans after a recipient serves in an assigned area. State government can also affect the distribution of physicians through licensure laws restricting numbers of specialists in certain areas.

The last suggested influence is recruitment by communities through combined strategies involving guaranteed start-up income or supplements and office space.

Conclusion: Physician distribution can be influenced by many factors and strategies. Such strategies are most effective when coordinated and related to an overall State strategy for improving physician distribution.



annotated bibliography



Gagnon, Jean Paul, Ph.D., and Jang, Raymond, Ph.D., "Federal Control of Pharmaceutical Costs," Washington, D.C., May 1979.

Under a grant from Roche Laboratories, a division of Hoffman-La Roche, Inc., Professor Gagnon and Jang, examined the development, implementation, and results of the Federal government's MAC program to control drug costs in federal health care programs. Their findings and recommendations are in this report.

The authors describe the three parts of the MAC program: setting maximum allowable costs (MAC) on multisource drug products; setting estimated acquisition cost (EAC) limits for drugs; and publishing a drug guide for physicians to use in selecting drugs. They also describe the roles of the Pharmaceutical Reimbursement Board (PRB) and the Pharmaceutical Reimbursement Advisory Committee (PRAC). Many factors influenced the form and development of the MAC regulations, the authors report. The drug industry opposed the program and filed law suits; and the government attempted to control administrative costs which impeded progress.

The report concludes that because of the complex factors of the program and their implementation throughout the country, even HEW cannot accurately predict dollar savings from the MAC program. Estimates between \$10 million and \$20 million annually were made during a six month period by different HEW officials. The authors feel that an independent evaluation is essential to determine the actual benefit of the program. They also feel that certain manipulations of cost by the provider industry because of their opposition to the program may be defeating program goals. The authors propose that the program be carefully and objectively analyzed to determine its benefit to providers as well as the Federal government, and they offer several immediate adjustments that might make providers more receptive to the program. They further cite opinions of others. One suggests that because of other factors such as the increased use of generic prescriptions and repeal by 39 States of their anti-substitution laws, the program may be unnecessary. The opposite opinion of another expert in the field is that the program should be strengthened and possibly designed to confine recipients to specific providers whose costs could be more readily controlled. Professor Gagnon and Jang conclude that, "the MAC program has not convincingly achieved its objectives."

Ackerman, John H., M.D., M.P.H. and Valth, Mary F., M.D., M.S., "The Relationship Between Unemployment and Health," *The Ohio State Medical Journal*, Vol. 74, No. 10, October 1978, pages 639-641.

This brief review of the literature dealing with the relationship between unemployment and health describes some of the research that has been conducted and reveals the area in which the authors believe further studies are needed. The authors conclude that researchers have found a positive correlation between unemployment and several different pathologic conditions. Complicating problems of the issue are: 1) income and medical benefits available to the unemployed; 2) length of unemployment period; 3) income and educational level prior to unemployment; and 4) length of time necessary for certain physical ailments

to develop and manifest themselves. Researchers conclude that the adverse effects of unemployment on health are based on three factors: 1) poor nutrition due to an altered diet as a result of decreased food budget; 2) increased sociopsychologic stress which leads to biologic changes, especially fluctuations in hormone levels; and 3) lack of necessary medical care due to decreased use of health services. The review describes the four principal methods used: 1) individual case studies; 2) surveys consisting of questionnaires, interviews, and physical examinations among certain populations; 3) examination of statistical correlations between different indices of health and unemployment rates; and 4) a prospective method which helps to establish causal relationships. The authors state that it is in the last area, the prospective method, that more studies need to be done.

Archer, Sarah Ellen, R.N., Dr. P.H., Fleshman, Ruth P., R.N., M.S., Carver, Carol L., R.N., M.S., Adelman Lannie, R.N., M.S., "Life-Style Indicators for Interventions to Facilitate Elderly Persons' Independence," *Health Values: Achieving High Level Wellness*, Vol. 3, No. 3, May/June 1979, pages 129-135.

Nursing Dynamics Corporation (NDC) surveyed elderly people in four counties in California to develop a data base for program planning and implementation. NDC's objectives are primary prevention and health promotion. Because NDC's target population is a socially active one, using senior centers, clubs, and Title VII dining sites, they conducted their survey in those places.

The surveyors from NDC conclude that: 1) case-by-case information from providers cannot be accurately extrapolated to entire populations for planning services; 2) survey methodology provides the opportunity to systematically gather epidemiologic data from large numbers of people in many community settings; 3) such outreach into the community has the potential for reaching people who may not otherwise be known to the system.

The three types of data collected were: 1) demographic data, 2) life style indicators, and 3) activities respondents would like. Life style indicators include types of recreation and exercise respondents participate in, ranking of themselves compared to other people their own age. At the top of the list of health promotional activities respondents would like through their senior centers and senior clubs were weight control and exercise. The article ranks the responses to this question. The results of the survey have been used by Area Agencies on Aging in developing area plans, as a basis for in-service programs by providers of services to community elderly, and so help justify expanded services by local public and voluntary agencies. The article should be of interest to other health practitioners working in community settings in the areas of primary prevention and health promotion. (Reprints: Sarah Ellen Archer, RN, Dr.PH, School of Nursing, Dept. of Mental Health and Community Nursing, University of California, Room N 505-Y, San Francisco, CA 94143)

The Effect of PSROs on Health Care Costs: Current Findings and Future Evaluations, Congressional Budget Office, Washington, D.C., June 1979.

This Congressional Budget Office (CBO) background paper analyzes the effectiveness of PSROs in curbing the growth of expenditures for health care. The paper also identifies the gaps in what is known about the effectiveness of the PSRO program and explains why a more complete and reliable evaluation will depend on the way in which the program is implemented in the future. Because of CBO's mandate to provide objective analysis, the study offers no recommendations. The authors stress that figures on the effect of PSROs on the number of patient hospital days are inaccurate because of flawed or irrelevant data. They state further that, although PSROs seem to be effective in reducing Medicare utilization, it is doubtful that they produce a net savings. The authors suggest that changes are needed in both implementation and evaluation to allow for increased reliability in future evaluations of the program. In addition to background information on PSROs, the paper includes an analysis of three aspects of PSROs' effectiveness: 1) a review of a number of evaluation studies to assess the effectiveness of PSROs in reducing the use of hospital services by Medicare and Medicaid beneficiaries; 2) a presentation of calculations of the net savings yielded by the program; and 3) a comparison of the program's net savings with Federal expenditures for inpatient care in short term hospitals. In addition to discussing factors that may be limiting the effectiveness of PSROs and options for the program and for its evaluation, the authors describe alternative patterns of

future program implementation that would yield more reliable assessments of the program's effectiveness, review case studies of two PSROs, and discuss the recent HCFA PSRO rate study.

Daly, John Charles, *Rising Health Care Costs: Public and Private Responses*, American Enterprise Institute Public Policy Forum, April 26, 1979.

The forum and the edited transcript examine: 1) why the cost of health care is increasing faster than the cost of most goods and services; and 2) what can be done to slow the rate of increase. The panel discusses the economic incentives at work in the health care market and the prospects for providing health care more efficiently. The panel devotes special attention to the effect of various policies on the medical trade-offs between cost and quality. Among the cost control methods the panel discusses are more emphasis on preventive medicine, expanded health maintenance organizations, eliminating fraud and abuse, increased consumer awareness, hospital revenue limits, limiting excess beds and adoption of new technology, health planning, utilization review, second surgical opinions, the health care industry's voluntary effort, patient cost-sharing, reform of tax subsidies for the purchase of health insurance, restructuring financial incentives, antitrust enforcement, and innovative ways of delivering and paying for health care services. Panelists were: John Charles Daly, former ABC News Chief, Moderator; Joseph F. Boyle, M.D., member of the Board of Trustees, American Medical Association, and president-elect of the California Medical Association; Hale Champion, former Under Secretary, HEW; Clark C. Havighurst, professor of law at Duke University and an AEI adjunct scholar; Dave Stockman, member of the Health and Environment Subcommittee, Committee on Interstate and Foreign Commerce, U.S. House of Representatives.

Heffner, Dennis L., Ph.D., *A Study to Determine the Cost-Effectiveness of a Restrictive Formulary: The Louisiana Experience*, National Pharmaceutical Council, Inc., 1030 15th Street, N.W., Washington, D.C. 20005, June 1979.

In 1976, the Louisiana Medicaid drug program limited reimbursement for pharmaceutical products through implementation of a restrictive formulary. This study examines changes in expenditures for drug products, changes in expenditures for non-drug products, and the incidence of specific disease types occurring after Louisiana implemented its drug formulary. Pharmaceutical products dropped from the list of covered services were: anorexics; cough and cold preparations; minor tranquilizers; multiple ingredient anti-anemia preparations; certain gastrointestinal drugs; certain vitamins or vitamin-containing products; enzymes and other miscellaneous products. Major findings include: 1) although prescription expenditures decreased, demand and expenditures for non-drug items increased; 2) the largest increases in demand for non-prescription items occurred in the OAA and ATD categories; 3) AFDC costs decreased for both prescriptions and physician visits (because many physician visits are made in order to receive a prescription, according to the author); 4) demand for hospital days showed the highest overall increase for any of the six services classes identified; and 5) disease diagnoses, grouped according to their relationship with the restricted products, showed a high correlation with the restricted products. The author concludes that, although utilization figures do not provide proof, diagnosis information indicates a strong probability that a causal relationship exists between Louisiana's restricted formulary and the increased demand for non-prescription services. The author recommends that program administrators evaluate the impact of cost containment efforts on the entire program, not just a particular segment of it. The author speculates that the study data strongly suggest that the Louisiana restricted formulary, which eliminated several therapeutic categories, had an adverse impact on the health status of the Medicaid population and increased the associated costs for non-prescription services.

Ingman, Stanley R., Ph.D., McDonald, Catherine A., M.A., and Lusky Richard, M.A., "An Alternative Model in Geriatric Care," *Journal of the American Geriatrics Society*, Vol. 27, No. 6, June 1979, pages 279-283.

The alternative model is the attempt of one long term facility to develop a comprehensive geriatric program including care of the patient in a hospital, a skilled nursing home, a day hospital, or a clinic for care of the ambulatory aged. The goal was to raise issues for debate and discussion, especially in terms of the evolving role of medical directors in long term care. The authors emphasize the need for "group profes-

sionalism" in cooperation with the board of citizens in community geriatric practice. The authors state that the typical nursing home situation is not attractive to most physicians. The article includes an analysis of the changes, successes, and problems in each of the areas of the reorganization—medical staff organization, nursing service, pharmacy services, preadmission team, activation of patients, rehabilitation services, and other components.

Schicke, Romuald K., "A Methodology in Surveying Geriatric Patients, Facilities, and Services," *Social Science and Medicine*, Vol. 12, No. 4A, July 1978, pages 229-234.

The study focuses upon the methodology employed in surveying long term care patients, geriatric facilities, and their services, with implications for planning endeavors in improving medical and social services for the aged. The two aspects of the research are: 1) patient characteristics reflecting service needs; and 2) data relating to the services themselves. For planning purposes, the author provides a comparison of the social and medical needs of the aged with the capabilities of services to meet those needs. Those over 65 are the main users of long term facilities, including nursing homes. According to the author, the proper level of services to be provided for the geriatric patient is of utmost importance in order to minimize the "institutionalization syndrome" and to allow for the best possible social functioning. The objective of the study was to render a profile of patient population in the light of the characteristics of long term care facilities in New Jersey.

The author concludes that, because of varying needs for social and medical services, an intensified effort is needed to meet them at various levels of institutional and extra-institutional care, emphasizing greater need for cooperation and coordination among facilities in order to cope with demands of the increased proportion of the aged. The study covers a one-day census of 9,918 patients in long term care facilities, with indepth analysis of a representative 10% sample of data. Two thirds of all residents were widowed; the average age was 79.3 years. Nurses and physicians most often selected physical deterioration, semi-ambulatory mobility status, and mental deterioration from 14 patient characteristics listed; less than 9% of patients were described as convalescent or recovering. The author also reports on research on rehabilitative potential of long term care patients.

Rhee, Sang-O, Ph.D., Lyons, Thomas F., Ph.D., and Payne, Beverly, C., M.D., "Patient Race and Physician Performances: Quality of Medical Care, Hospital Admissions, and Hospital Stays," *Medical Care*, Vol. 17, No. 7, July 1979, pages 737-747.

The study attempts to determine the extent of the relationship between patient race and physicians' performance in patient care. The sample in the study consisted of 3,175 hospital episodes of patients discharged from 22 short-term general hospitals in Hawaii. The episodes were derived from 15 major diagnostic categories. The study measured physician performance on the basis of quality of medical care provided, the appropriateness of hospital admissions, and the appropriateness of hospital stays, including understays and overstays. The authors conclude that: 1) patient race had very limited influence on physicians' performance (the quality of medical care, the appropriateness of hospital admissions, and the appropriateness of hospital stays); 2) among Asian-Americans, there was no distinct difference in medical care received by Japanese, Chinese, and Filipino; 4) there was clear evidence of racial mutual selection between patients and physicians; and 5) patients treated by the physicians with the same racial/ethnic backgrounds received care neither superior nor inferior to the care received by patients from physicians with different backgrounds. The authors caution that Hawaii is not an appropriate setting for race or ethnicity to be used as a substitute for poverty, and recommend that future studies distinguish between race and socioeconomic variables.

Rigby, Donald, and Pauce, Elsa, "Supplemental Security Income: Compilation Based on Selected Characteristics of Optional State Supplementation Programs, October 1977," *Research and Statistics Note*, Note No. 9, HEW Publication No. (SSA) 79-11701, August 23, 1979.

This report contains the general provisions of eligibility, assistance, and administration regarding optional State supplementation programs for basic needs. The 42 States that had some form of supplementation

program in effect on October 1, 1977, are classified according to the data furnished in the "Selected Characteristics of State Supplementation Programs as of October 1977." The report also includes a compilation of the "special needs" items for which a State may make additional payments.

Stokes, Bruce, "Taking Responsibility for Health," *Local Responses to Global Problems: A Key to Meeting Basic Human Needs*, Worldwatch Paper 17, February 1978, Worldwatch Institute, 1776 Massachusetts Avenue, N.W., Washington, D.C. 20036, pages 29-40.

Stokes, Bruce, "Self-Care: A Nation's Best Health Insurance," *Science*, Vol. 205/4406, August 10, 1979, page 547.

Health care costs is one of the major considerations in the current debate over various national health insurance plans. The author of the booklet and article believes that one of the cheapest and most effective ways to cut health care costs is through more self-care. About five million people in the U.S. belong to physical or mental self-help groups, from Alcoholics Anonymous to feminist health collectives. Such programs have proved especially effective among people with chronic illnesses. A diabetic self-care program run by the University of Southern California reduced the number of patients experiencing diabetic coma by two-thirds and halved the number of emergency room visits. According to Stokes, such programs saved hospitals and consumers \$1.7 million over two years, a fraction of what could be saved if self-care became the first line of medical defense nationwide. Stokes believes that any national health plan should include self-care incentives, and a deductible of perhaps \$500 or \$1,000 per family a year. Savings from such a plan could finance consumer education in health care and home treatment of chronic illnesses. The author does not advocate shifting the responsibility for health care from health care professionals to the individual patient. Rather, he recommends greater use of general practitioners, more self-care, and healthier lifestyles. The logical extension of increased recognition of the individual's role in treating health problems is the growing responsibility of the individual and the community for preventing those circumstances that cause disease. He also emphasizes the need for professional monitoring of self care programs to ensure that serious health problems are not mistreated. Individual responsibility does not absolve the government or the community from equally important roles in preventive health care. The author is presently writing a book on various self help activities.

"Medical Technology: The Culprit Behind Health Care Costs?" HEW, Public Health Service, Publication No. (PHS) 79-3216, June 1979.

The 16 papers in this booklet edited by Stuart H. Altman and Robert Blendon were part of a series presented at a symposium conducted by a non-profit educational organization, the Sun Valley Forum on National Health, in August 1977. The Forum was convened to examine the relationship between medical technology and growing public concern about rapidly rising health care costs. For purposes of discussion, the symposium restricted discussions of the term "medical technology" to three categories which appear to have a high potential for affecting health care costs: (1) those requiring large capital expenditures (i.e., a computerized tomography (CT) scanner); (2) those having enormous utilization potential for large numbers of providers, without requiring large capital expenditures or high personnel costs (i.e., certain surgical procedures or common laboratory tests); and (3) those with high personnel costs (i.e., renal dialysis). The symposium examined evidence relating to whether the introduction of various types of medical technologies has been an important factor in the rapid rise in health care costs and discussed the need and implications of various proposed public sector strategies to limit future cost increases by controlling the introduction of expensive medical technologies.

The volume is divided into three sections. The first section provides an overall perspective on the symposium's main issue: Has medical technology significantly impacted on the per unit costs of national health care expenditures? Some of the articles contained in this section deal with statistical evidence of the relationships between health care costs and medical technologies. The second section considers the different types of technology which appear to be most crucial in terms of their cost implications. Some of this section's articles concern case studies on the development, introduction and use of technology. The last section suggests possible policies to control the costs attributed to the use of medical technologies. Some

of these articles discuss greater public sector intervention in the health sector to control costs and the need for governmental approval of expensive new medical services or devices, based on demonstrated effectiveness and safety, prior to their introduction.

“Medicaid Capitation Experiment Works in Two Iowa Counties; RPh’s Get Rebates,” *American Druggist*, Vol. 179, No. 6, June 1979, page 92.

Iowa pharmacists recently reported successful experiments in capitation reimbursement for Medicaid services. The project began in 1976 when 23 pharmacies in two rural counties received fixed monthly fees for Medicaid patients: \$2.50 for AFDC recipients; \$14 for SSI; and \$30 for long term care. Such capitation programs offer economic incentive to pharmacists to keep Medicaid expenditures down by dispensing lower cost generic substitutions, and permit monitoring for inappropriate drug use.

Around the time this project began, Iowa’s Drug Product Selection Act took effect. During the project’s second year, 8.7% of prescriptions showed generic substitution, compared to 0.2% in the year before the project began. The capitation system also eliminates costs of filing individual prescription claims. Project staff estimate also a \$132,000 Medicaid savings if capitation is applied Statewide.

Hospices and Related Facilities for the Terminally Ill: Selected Bibliographic References; Health Planning Bibliography Series, HEW, Public Health Service, Publication No. (HRA) 79-14022, January 1979.

Due to increasing interest in hospice care for the terminally ill, the National Health Planning Information Center prepared this bibliography for health planners involved in such alternative programs. Publications cited in the 50 page bibliography are in four sections: hospice facilities; hospice services; home health care for the terminally ill; and bibliographies, pamphlets and newspaper articles on hospice facilities and care. Abstracts are included for many. Copies may be obtained from the U.S. Government Printing Office, Washington, D.C. 20402.

Selected Characteristics of Living Arrangements and Institutionalization of the Elderly: 1970 Census Data, Report No. 11, HCFA Research and Demonstration Series, September 1978.

HCFA offers States this report on the living arrangements, marital status and other characteristics of the elderly in various geographical areas. Estimates are from sample data collected in the 1970 Census of Population and Housing. Five hundred pages of statistical tables, along with maps showing geographical variations are included. Copies are available from the U.S. Government Printing Office, Washington, D.C. 20402.

Dental Manpower Fact Book, HEW, Public Health Service, Publication No. (HRA) 79-14, March 1979.

This collection of statistical tables on dental manpower supply, distribution, characteristics, education and other aspects of dental services may be useful to health planners, educators, and administrators trying to promote the effective use of dental resources. For example, one of the nine sections provides trend data from 1950 through 1970 on national health expenditures; another focuses on public use of dental services, including variations by demographic characteristics, and geographic areas for 1977.

The information, presented on a Regional and State basis, might serve as a framework for EPSDT program staff for more specific planning and evaluation. In addition, a section on “Oral Health Status” attests to the cost effectiveness of preventive measures and early prevention. The fact book is available from the U.S. Government Printing Office, Washington, D.C. 20402.

Barbas, Nancy, and McGill, Lurilynn, “An Exploratory Study of the Effects of Monitoring Referrals in EPSDT Screening,” *American Journal of Public Health*, Vol. 68, No. 10, October 1978, page 1021.

A HCFA funded Dallas demonstration project, in operation since 1976, has three designated areas for experimentation in outreach and case monitoring. Recently, to test the premise that case monitoring may be a vital link between screening and treatment, the project addressed the effects of degrees of case monitoring on treatment initiation and completion for EPSDT children.

At the onset, some 1600 eligible children were screened in the three Dallas locations. Those referred for diagnosis and treatment were randomly selected and placed into three groups, according to degree of case monitoring received: Group I—received no case monitoring assistance; Group II—received assistance in diagnosis or treatment indicated in screening; and Group III—received continuous assistance from referral through completion.

Standard follow-up included suggesting health care resources to clients, appointment scheduling, and transportation arrangements. Case workers were similar in education, job rank, and experiences. Recipient problems most commonly referred were anemia, vision, heart murmur, skin and genito-urinary problems. Contrary to expectations, data indicated no significant differences in the number of treatment completions between groups. In fact, Group I, having received no monitoring assistance, completed 91% of treatments, compared to 85% in Group II, and 88% in Group III. The author suggests that the additional time and expense of case monitoring through completed treatment may not be cost effective in Dallas, but, in areas where transportation providers are scarce, results may differ.

Weissert, William G., "Rationales for Public Health Insurance Coverage of Geriatric Day Care: Issues, Options, and Impacts," *Journal of Health Politics, Policy and Law*, Vol. 3, No. 4, Winter 1979, page 555-567.

The author examines potential objectives for geriatric day care—cost saving, improving health status, and improving quality of life—and considers the consequences of each in terms of costs, and numbers of types of patients served. His discussion may apply to other alternatives as well. Three types of care for which day care may be substituted are considered: 1) long term maintenance for the patient who cannot perform tasks associated with daily living, and lives alone or has become a burden to family; 2) long term custodial care of the mentally or emotionally impaired; and 3) short term rehabilitative care extending beyond an ambulatory program that can provide early release from an institution.

Weissert believes the ideal long term care system would provide the right level of care, at the right time, in the right setting, at the maximum quality, and would be the most cost effective. However, he adds, our present long term care system serves only a small portion of the elderly, encourages inappropriate placement, and promotes dependence instead of independence.

New goals can be set and achieved for alternatives, including improved quality of life for the elderly. First, Weissert declares "additional analysis is needed to project the consequences of differing eligibility criteria among the total population of the elderly, and to overlay these with supply, consumer preference, access, and copayment and deductible requirements to estimate demand under differing objectives for long term care policy."

Family Health in an Era of Stress, The General Mills American Family Report, 1978-79. Conducted by Yankelovich, Skelly and White, Inc.

This recent survey was designed to give insight to family health including exercise, nutrition, preventive medicine, stress within the family, medical costs, satisfaction with health care, overmedication, the government's role in family health and mother/father roles in health parenting. The study of 1,254 families focussed on 2,191 individual interviews of adults, teenagers and spouses.

Results indicate that 70% believe most Americans are more concerned about health than they were a few years ago, yet 48% are cutting back on health practices as a result of inflation. (The trend is higher among low income families, minorities and single parents.) Other results include: 1) fewer than three out of ten families feel well informed about good health practices, and an equal number admit they are poorly informed; 2) 75% expressed confidence in the medical profession as the most reliable source of health information; 3) two out of five sampled believe it is up to the government to see that all Americans have good health care whether they can afford it or not; and 4) about one of four parents had the opinion that government or schools are responsible for immunizing their children.

Denial of health risks is prevalent: more than half of the families are unwilling to face potential catastrophic illness. A sizable minority believe "when your number is up, it's up", primarily the senior citizens and low income family members.

“Emergency Medical Services Systems Research Projects, 1978,” HEW, Public Health Service, Publication No. (PHS) 79-3220, November 1978.

The National Center for Health Services Research compiled this publication from individual reports of the 25 Emergency Medical Services (EMS) projects operating during fiscal year 1978. Under Section 1205 of the Emergency Medical Services Systems Act of 1973, projects were funded to research emergency techniques, methods, devices and delivery. Under the 1976 amendments to the EMSS Act, reports are required from each of the projects containing recommendations for applying the research. Each project summary was prepared by the principal investigator of the project. The summaries cover a wide range of activities related to emergency medical services; each describes the project, its significance, its progress, and the dissemination of research results. Interested persons are encouraged by NCHSR to contact the principal investigator of the project for further information.

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